SDMS US EPA REGION V -1

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№ 0000004

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April 2, 1990

VIA MESSENGER

Ms. Nancy Justus
Superfund Program Management Branch, 5HSM-12
United States Environmental Protection Agency
Region V
230 South Dearborn
Chicago, Illinois 60604

Re: USEPA Request for Information regarding the Outboard Marine Corporation Site in Waukegan, Illinois

Dear Ms. Justus:

North Shore Gas Company ("North Shore") hereby responds to the United States Environmental Protection Agency's ("USEPA") Request for Information Pursuant to Section 104(e) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and Section 3007 of the Resource Conservation and Recovery Act ("RCRA"), regarding the Outboard Marine Corporation Site in Waukegan, Illinois.

Please note that North Shore's responses and exhibits refer to a number of companies in addition to North Shore. For purposes of clarity, an earlier company, also known as North Shore Gas Company, is referred to herein as "Gas Company." None of the responses are or should be construed as a statement or admission by North Shore that it is related in any manner to any other company or entity referred to in the responses. North Shore's responses refer to a tract of land described in Exhibit C ("the Property"), which was conveyed by North Shore Coke and Chemical Company ("Coke Company") to Gas Company in 1941 and which was subsequently conveyed from Gas Company to Waukegan Coke Corporation ("Waukegan Coke") in 1947. The Request defines "'(t)he Site' or 'the

Facility'" to "mean and include the location generally described as a Tract of land in Section 22, Township 45 North, Range 12 East ... ". North Shore is unable to determine what portion of the Property, if any, is coextensive with the area of Section 22, Township 45 that USEPA classifies as the Outboard Marine Corporation site.

North Shore also asks USEPA to clarify its legal basis for this Request under Section 3007 of RCRA, 42 U.S.C. § 6927. Section 3007(a) requires any person who has or does handle *hazardous waste* to furnish information to USEPA or its designates relating to such wastes. 42 U.S.C. § 6927(a), emphasis added. As explained below, the wastes that may have been generated by other companies at the Property resulted from the operation of the coke oven gas plant facilities. These wastes, e.g., process wastewater and coal ash, even if disposed on the Site by the companies that generated them, are special study wastes pursuant to Sections 3301(b) and 8002 of RCRA and thus are not hazardous wastes as contemplated by Section 3007.

Under the Bevill Amendment regulatory exclusions contained at Section 3001(b) of RCRA, 42 U.S.C. § 6921(b), certain types of high volume, low toxicity wastes cannot be regulated as hazardous wastes until USEPA completes and submits to Congress detailed reports regarding the potential danger, if any, to human health and the environment from the wastes. Wastes exempt from hazardous waste regulation under Bevill include mineral processing wastes, wastes associated with the production of geothermal energy and other wastes generated primarily from the combustion of coal or other fossil fuels. Further, USEPA has stated its intention not to apply RCRA requirements to special study wastes that were disposed prior to any determination under Section 8002 that these wastes are subject to regulation as hazardous wastes under Subtitle C of RCRA. When USEPA concluded as a result of its studies under Section 8002 that certain mineral processing wastes were in fact hazardous wastes, it explicitly refused to regulate inactive disposal areas for these wastes as hazardous waste facilities under Subtitle C:

> ...today's final rule does not impose Subtitle C requirements (such as those for closure and post-closure care) on mineral processing wastes that were disposed prior to the effective date of today's rule, unless they are actively managed after the effective date. This provision ensures that those mineral processing wastes that were originally excluded from Subtitle C under the Bevill exclusion, and are now considered hazardous under the reinterpretation of the Bevill exclusion, are not subject to subtitle C requirements if the wastes were disposed prior to the effective date of the final rule. EPA is maintaining its proposed approach largely because of its long-standing policy of not regulating wastes under RCRA that were disposed prior to the effective date of a rule governing those wastes.

54 Fed. Reg 36592, 36597 (Sept. 1, 1989). The wastes identified in North Shore's responses below are all wastes that are mineral processing wastes or are otherwise identified as special study wastes under the Bevill Amendment. USEPA has recognized in other proceedings regarding coal tar sites that wastes from alleged coal sites are special study wastes. The Bevill Amendment provides that USEPA may not regulate a special study waste under RCRA until it submits a report to Congress for that waste. USEPA has not submitted a report to Congress for the special study wastes identified in North Shore's Response. RCRA Section 3007, which pertains only to persons who have handled hazardous wastes, therefore does not apply to this Request.

North Shore also notes that because USEPA's Request pertains to special study wastes, these wastes are not subject to CERCLA unless there is a release or substantial threat of a release of a hazardous substance -- i.e., a hazardous constituent -- from them. Therefore, USEPA must carefully evaluate the concentrations of any hazardous constituents in the wastes and the potential for the release of such constituents prior to deciding whether the wastes are subject to CERCLA. In 1978, USEPA noted that it had very little information on the composition, characteristics and degree of hazard that may be posed by special wastes. 43 Fed. Reg. 58,991, 59,015 - 16 (Dec. 18, 1978). USEPA has since completed only one of the special waste studies required by the 1980 Bevill Amendment. The Site was placed on the National Priorities List ("NPL") on September 8, 1983. (48 Fed.Reg. 40658.) Since the Site was listed on the NPL prior to the effective date of the requirement that USEPA apply specific evaluative criteria prior to the NPL listing, the impact of any special study wastes may not have been examined adequately. See 42 U.S.C. § 9605(g) and 9625. As a result, North Shore will submit a Freedom of Information Act request to USEPA regarding the studies performed pertaining to special study wastes at the Site and the types, volumes and locations of such wastes that have been identified at the Site.

North Shore further states that pursuant to USEPA's Request, this Response includes the affidavit of North Shore's Vice-President, Donald H. Keller, regarding the scope of North Shore's searches and inquiries.

INFORMATION REQUESTS AND RESPONSES

REQUEST #1: Identify all persons consulted in the preparation of the answers to these Information Requests.

RESPONSE:

Mr. Donald H. Keller
Vice President
North Shore Gas Company
3001 Grand Avenue
Waukegan, Illinois 60085

Mr. Russell Stegman
Manager, Operations
North Shore Gas Company
3001 Grand Avenue
Waukegan, Illinois 60085

Ms. Jean Richardson
North Shore Gas Company
3001 Grand Avenue
Waukegan, Illinois 60085

Mr. Glen F. Armstrong
Superintendent
Codes, Standards and Plant Design
The Peoples Gas Light and Coke Company
122 South Michigan Avenue
Chicago, Illinois 60603

REQUEST #2: Identify all documents consulted, examined or referred to in the preparation of the answers to these Requests and provide copies of all such documents.

RESPONSE: See Exhibit A, which is entitled "North Shore's List of Exhibits to USEPA Information Request." North Shore has examined voluminous amounts of documents regarding Gas Company and Coke Company so that North Shore may provide as precise a response as possible to this Request. As a result, North Shore is providing copies of the documents that were used in its preparation of this Response and for purposes of clarity and practicality, omits those that are not relevant to the Request.

REQUEST #3: If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request or who may be able to provide additional responsive documents, identify such persons.

RESPONSE: Waukegan Coke Corporation, or any successor thereto, and General Motors Corporation. As demonstrated by Exhibits I through K of this Response, Gas Company sold the Property and a coke plant on the Property to Waukegan Coke in 1947. As these exhibits and the 1940s annual report excerpts contained in Exhibit U explain, Gas Company's conversion to the use of natural gas ended Gas Company's need to produce its own gas supplies at manufactured gas facilities such as the coke plant. Conversion to natural gas began and was completed in 1947. The change in the nature of the Gas Company's business to a natural gas distribution company and resulting cessation of its manufactured gas business at the Property ended for legal purposes any purported chain of corporate successor liability to the present North Shore Gas Company. North Shore has never been in the manufactured gas business and, as evidenced by the exhibits hereto, never acquired through Gas Company the coke plant or other assets through which hazardous substances could have potentially been released at the Property. Gas Company did not retain such assets or liabilities when it sold the Property and coke plant as an operating business to Waukegan Coke in 1947. See generally the Bill of Sale at Exhibit F, Exhibits F-K, including Illinois Commerce Commission ("Ill.C.C.") orders, and Exhibit T regarding Gas Company's sale of the coke plant and change in business to natural gas distribution.

North Shore's research activities in response to this Request indicate that Waukegan Coke may have been a subsidiary or affiliate of General Motors Corporation ("General Motors") at the time of the 1947 coke plant sale or acquired such status soon after the sale. See, e.g., Exhibit K, which is a series of letters between General Motors and Gas Company regarding proration and payment of property tax liabilities for the Property as a result of the sale. General Motors' Chevrolet Saginaw division appears to have operated the former coke plant site as a foundry until at least the late 1950s. See Exhibit W, which is an excerpt from Ahmed, G. Munir, "Manufacturing Structure and Pattern of Waukegan - North Chicago", University of Chicago Press, 1957. At pages 26 - 28, Dr. Ahmed states that, in the Waukegan Harbor industrial area, the "chief industries" are "Johnson Motors, Mosow Screw, Chevrolet Saginaw Foundry, and Blatchford Calf Metal Company." See also the enlargement of Fig. 23 from Dr. Ahmed's book, which is contained in Exhibit X hereto. In this photograph, which depicts the foundry area, two stacks are shown on the foundry structures in the foreground. The word "Chevrolet" can been seen on the foundry stack located on the right. Except for the license agreements and entry permit documents that North Shore has obtained for its pipeline easements from later or continuous property owners, such as Outboard Marine and the Elgin, Joliet and Eastern Railway Company, North Shore does not have any documents or knowledge regarding the ownership of the Property after 1957. See Exhibit V.

North Shore further notes that USEPA might be able to obtain more specific information regarding the design, capacity and potential uses of the coke ovens from the ovens' apparent manufacturer, the Koppers Company.

REQUEST #4: State the dates during which you owned, operated, leased or had easements or other rights to conduct activities at the Site or any portion of the Site and provide copies of all documents evidencing or relating to such ownership, operation or lease arrangement (e.g., deeds, leases, etc.)

RESPONSE: North Shore has held two pipeline easements over the Property since late 1963, when it became the natural gas utility for the north suburban area of Chicago that includes the Property. North Shore became the gas utility for the area as a result of a series of events. In 1962, the majority of common stock of the Gas Company was acquired by The Peoples Gas Light and Coke Company ("Peoples Gas") through an exchange offer with the common stockholders of the Gas Company. On December 16, 1963, all of the assets of the Gas Company were acquired by Lake Gas Company, a subsidiary of Peoples Gas, and Gas Company was thereafter liquidated and dissolved. Subsequently, Lake Gas Company changed its name to North Shore Gas Company. North Shore is continuing its research into the 1962-63 events and will supplement this Response if the research reveals any additional relevant or responsive information.

North Shore's pipeline easements at the Property are solely for the purpose of maintaining gas distribution lines at the Property. The original 1947 easements from Waukegan Coke to Gas Company are contained in Exhibit G and accurately describe the easements that North Shore has held since 1963. From 1927 to 1941, Coke Company appears to have owned the Property and used portions of it as a coke plant. In 1937, the law firm of Hall and Hulse issued an "Opinion ... Covering Title to Real Estate of North Shore Coke & Chemical Company." (Exhibit U.) North Shore is aware that the coke plant was located on the Property described in Exhibit U but does not know the precise legal description of that portion of the Property on which the coke plant stood. A report prepared by Duff and Phelps in 1940 states that the Property had been acquired by William A. Baehr in 1927. Construction of the coke plant was begun after the acquisition and completed in mid-1928. (See Exhibit S.) In a January, 1927 Agreement among the Elgin, Joliet and Eastern Railway Company, Johnson Motor Company, Mr. Baehr and the City of Waukegan, Mr. Baehr agreed to sell to the City within five years a one hundred foot strip of land bordering Lake Michigan. (Exhibit B.) In 1941, Gas Company acquired the Property from Coke Company. (Exhibits C - E.) In 1947, Gas Company sold the Property and the operating coke plant to Waukegan Coke as a result of the change in Gas Company's product and business to natural gas. Gas Company retained after the sale the two permanent pipeline easements over the Property. (Exhibit G.)

<u>REQUEST #5:</u> Provide information about the Site, including the following:

a. property boundaries, including a written legal description;

b. surface structures (<u>e.g.</u>, buildings, tanks, <u>etc.</u>);

c. ground water wells, including drilling logs;

d. storm water drainage system, and sanitary sewer system, past and present, including septic tank(s) and subsurface disposal field(s), and other underground structures; and where, when and how such systems are or were emptied;

e. any and all additions, demolitions or changes of any kind on, under or about the Site, to physical structures or to the property itself (<u>e.g.</u>, excavation work);

f. all maps, aerial photographs and drawing of the Site in your possession.

<u>RESPONSE:</u>

a. <u>See</u> Exhibit D, which legally describes the boundaries of the Property as of the date of the sale to the Gas Company from the Coke Company in 1941. <u>See also</u> Exhibit J, which includes the 1947 warranty deed transferring ownership of the coke plant and the Property to Waukegan Coke.

b. <u>See</u> Exhibits M through R, which purport to show surface structures on the Property on the dates they were drafted or revised. <u>See also</u> Exhibit J, which includes a bill of sale that describes items and structures that were sold to Gas Company by Coke

Company in 1941. Exhibit O refers to various future structures. North Shore is not aware whether these structures were actually built pursuant to Exhibit O. See Exhibit X, Fig. 22, which is a photograph enlarged from Dr. Ahmed's book and which shows the General Motors' foundry. See also the drawings and maps attached to the license agreements and related documents in Exhibit V. Exhibit S, the Duff & Phelps Report, also discusses the assets and operations of Coke Company as of 1940.

c. Exhibits M through R, which are drawings of the Property, show no groundwater wells. North Shore has no knowledge of such wells or drilling logs.

d. Exhibits P, Q and R depict the location of natural gas distribution lines and related equipment on the dates on which they were drawn or revised. Details were then placed on a large area map located in North Shore's Waukegan office. See also the maps and drawings contained in Exhibit V. North Shore has no knowledge of any other such structures on the Property.

e. The Duff & Phelps report states that construction of the coke plant was begun in 1927 and completed in mid-1928. (See Exhibit S.) North Shore does not have any knowledge of other excavation work, additions, demolitions or changes on, under or about the Property or physical structures thereon during the years 1927 - 47. As noted in its response to Request #3 above, General Motors may have altered the physical structures to the extent, if any, required to use the gas and coke produced by the coke ovens in the Chevrolet foundry operations. As also noted above, General Motors' use appears to have continued until at least 1957. While North Shore is aware that the foundry structures are no longer in existence, it is not aware of the date or circumstances of the demolition.

f. See Exhibits M through R and Exhibits W through X. If USEPA so requests, North Shore will make available to USEPA copies of its large area map, Dr. Ahmed's book and its other enlargements of photographs from the book.

REQUEST #6: Describe the nature of your activities or business at the Site. Include the following information:

a. types of products manufactured or service provided;

b. raw materials list;

c. SIC codes and generic description of manufacturing processes;

d. a description of waste streams from manufacturing or services.

RESPONSE: North Shore has not conducted any activities on the Property other than routine annual inspections for cathodic protection and maintenance of gas distribution lines that run through its pipeline easements on the Property. North Shore has not disposed of any wastes at the Property from these activities.

a. During the periods of their respective operations of the coke plant, Coke Company and Gas Company manufactured gas. Coke Company and Gas Company sold the byproducts incident to their gas manufacturing activities -- e.g., coke, sulfate, sulphur paste and tar. See Duff & Phelps Report (Exhibit S) at page 16. The records of Gas Company demonstrate that since the start of its operations, the coke plant offset the cost of its raw materials -- and thus reduced its cost to manufacture gas -- by selling the byproducts of gas production. See the 1929-1940 financial summary and the excerpts from 1944-1949 annual reports contained in Exhibit T. These records document that byproduct resale was essential to the profitability of the coke plant and that the financial statements of the Coke Company and Gas Company contained a specific line item for byproduct resale.

b. Coal was the principal raw material used in the manufacturing process. See, e.g., pages 19 through 21 of the Duff & Phelps Report (Exhibit S) for a description of the Coke Company plant and operations. North Shore has no other records or corporate knowledge regarding what other raw materials may have been used in the process at the coke plant. The Duff & Phelps Report suggests that the gas was produced by carbonization of coal in the coke ovens. The Ill.C.C.'s 1947 order allowing the Gas Company to discontinue its manufactured gas business and its use of the coke plant notes generally that the plant's continued use for standby purposes was not possible because "when (the plant is) out of service for a considerable length of time, (it) may require considerable replacement of refractory brick or other material before the plant can again be placed in operation." Order at p. 3.

c. Electric, gas and sanitary services are classified in SIC Major Group 49. Industry Group #4925 includes "coke oven gas, production and distribution" and "coke ovens, byproduct: operated for manufacture or distribution of gas". The Duff & Phelps Report does not describe the Coke Company's gasification process in detail, and except for information contained in the exhibits to this Response, North Shore does not have any other knowledge of the manufacturing process. Note that page 20 of the Duff & Phelps Report states that after delivery, the Gas Company mixed the gas that it purchased from the Coke Company with water gas.

d. In general, manufactured gas facilities produced several byproducts: coal tars, oils and coke. Coke was generally the primary byproduct of coke ovens used for gasification. Byproducts were useful for a variety of industries that used coke and for manufacturers who used the other byproducts in such products as cosmetics, paints, and pesticide/wood treatment chemicals. Thus, many gas facilities, including Coke Company, were served by railroad sidings allowing for off-site transport to manufacturing facilities. (See Exhibit S, the Duff & Phelps Report.)

Three byproducts are generally associated with manufactured gas facilities: 1) ash, which is similar to ordinary coal ash and was often generated in high volumes but is low in toxicity; 2) coal tars/sludges (which, as noted above, the Duff & Phelps Report and company financial data suggest were sold) and 3) spent oxide box wastes, which result from the gas purification step and contain metals and metal compounds including sulphur and sulfate (as noted above, also identified in the Duff & Phelps Report and company financial data as sold by Coke Company and Gas Company). North Shore currently has no specific knowledge of the presence or absence of these byproduct materials at the Property.

REQUEST #7: Identify all past and present solid waste units (e.g. waste piles, landfills, surface impoundments, contact cooling water discharge area(s), waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on the Site. For each such solid waste unit identified, provide the following information:

a. a map showing the unit's boundaries and the location of all known solid waste units whether currently in operation or not. This map should be drawn to scale, if possible, and clearly indicate the location and size of all past and present units;

b. the type of unit (e.g., storage area, landfill,waste pile, lagoon, etc.) and the dimensions of the unit;

c. the dates that the unit was in use;

d. the purpose and past usage (e.g., storage, spill containment, cooling, treatment, etc.);

e. the quantity and type(s) of materials (hazardous substances and any other chemicals) located in each unit; and

f. the construction (materials, composition), volume, size, dates of cleaning, and condition of each unit.

g. If the unit is no longer in use, describe how such unit closed and what actions were taken to prevent or address potential or actual releases of waste constituents from the unit.

RESPONSE:

Exhibits M through R are all drawings of the Property and vicinity. Exhibit V contains additional maps and drawings. North Shore has no personal knowledge of the actual operations of the coke plant other than the discussions contained in the Duff & Phelps Report (Exhibit S) and 1947 Ill.C.C. documents (Exhibits H and I). As a result, North Shore is unable to identify any solid waste units at the Property. It further notes that the Duff & Phelps Report does not state that any waste was disposed of on-site, but does note that the Coke Company sold the byproducts incident to its gas manufacturing activities. The financial data regarding the coke plant operations support this conclusion. See Exhibit T.

REQUEST #8: Provide a map showing when raw materials are or were stored and identify the raw materials.

RESPONSE: The drawings of the Property do not show where raw materials were stored. Exhibit O shows an area labeled "future coal bin", but North Shore has no knowledge regarding whether this structure was ever built. The Duff & Phelps report states that "(t)his site also includes a large coal storage yard from which the coal is conveyed to the ovens by means of endless belt conveyors." (Exhibit S.) This report, however, does not describe the precise location of the storage area. See also Exhibit X, which depicts the Property during the time of General Motors' foundry operations.

REQUEST #9: Provide all existing technical or analytical information about the Site including but not limited to data and documents related to soil, water (ground and surface), geology, geohydrology, or air quality in and about the Site. Provide copies of all documents containing such data and information, including both past and current aerial photographs as well as documents containing analysis or interpretation of such data.

RESPONSE: North Shore does not have any such technical or analytical information. North Shore notes, however, that it has provided maps, drawings and a copy of a photograph in response to other portions of this Request.

REQUEST #10: Identify all leaks, spills or releases of any kind into the environment of any hazardous substances, pollutants or contaminants that have occurred at or from the Site. In addition, identify:

a. when such releases occurred;

b. how the releases occurred;

c. what hazardous substances, pollutants or contaminants were released;

d. the amount of each hazardous substances, pollutant or contaminant so released;

e. where such releases occurred;

f. any and all activities undertaken in response to each such release or threatened release, including the notification of any agencies or governmental units about the release;

g. any and all investigations of the circumstances, nature, extent or location of each release or threatened release including the results of any soil, water (ground and surface), or air testing that was undertaken; and

h. all persons with information relating to those releases.

RESPONSE: North Shore has no such knowledge of any leaks, spills or releases into the environment of any hazardous substances, pollutants or contaminants occurring at or from the Property.

REQUEST #11: Identify the prior operators and lessors of the Site. For each such operator or lessor, identify:

a. the dates of their operations at or lease of the Site;

b. the nature of their operations at the Site;

c. all evidence that they controlled access to the Site; and

d. all evidence that a hazardous substance, pollutant or contaminant was released or threatened to be released at the Site and/or its solid waste units during the period in which they were operating at the Site.

RESPONSE:

a. Since North Shore has merely held pipeline easements at the Site since it became the natural gas utility for the area in 1963, it notes that it has not been an operator or lessor with respect to whom "prior" operators and lessors can be defined. North Shore nonetheless answers this Request to the best of its corporate knowledge for the time period prior to 1963. See Exhibit B, which indicates that Mr. Baehr purchased the Property from the Elgin, Joliet and Eastern Railway Company ("Railway Company") in 1927. North Shore has no other knowledge of owners and lessees of the Property before 1927. The license agreements and other documents in Exhibit V pertaining to the pipeline easements may identify subsequent property owners.

b. North Shore has no knowledge of the Railway Company's operations on the Property. North Shore also has no knowledge of operations that may have been conducted at the Property by Waukegan Coke or others during the time period from 1947 to 1963.

c. Except for documents in Exhibit V that pertain to the Railway Company, North Shore has no knowledge of the nature or extent of the Railway Company's control of access to the Property. North Shore also lacks corporate knowledge regarding the control of access to the Property by Waukegan Coke or others during the period 1947 - 1963.

d. North Shore does not have any knowledge that hazardous substances, pollutants or contaminants have been released or threatened to be released at the Site. North Shore has become aware through this Request and other non-company sources (e.g., news media) that USEPA has sought cleanup of PCBs and other waste that allegedly resulted from Outboard Marine Corporation's activities at the Site.

REQUEST #12: Identify all local, state and federal environmental permits ever granted for the Facility or any part thereof (e.g., RCRA permits, NPDES permits, etc.).

RESPONSE: North Shore has no knowledge of the issuance of any local, state or federal environmental permits to it or others in connection with the Property. North Shore's natural gas distribution activities and equipment do not require USEPA permits.

REQUEST #13: If Respondent is a Corporation, respond to the following requests:

a. provide a copy of the Articles of Incorporation and By-Laws of the Respondent;

b. provide Respondent's financial statements for the past five fiscal years, including, but not limited to those filed with the Internal Revenue Service and Securities and Exchange Commission; and

c. identify all of Respondent's current assets and liabilities and the persons who currently own or are responsible for such assets and liabilities.

RESPONSE:

a. See Exhibit Y (North Shore's Articles of Incorporation) and Exhibit Z (North Shore's bylaws).

b. See Exhibit AA (North Shore's Securities and Exchange Commission Form 10-K financial statements for the last five years).

c. See Exhibit AA.

REQUEST #14: If Respondent is a Partnership, provide copies of the Partnership Agreement.

RESPONSE: Not applicable.

REQUEST #15: If Respondent is a Trust, provide all relevant agreements and documents to support this claim.

RESPONSE: Not applicable.

By: ______________________
One of the Attorneys for
North Shore Gas Company

Russell B. Selman
Nancy J. Rich
Bell, Boyd & Lloyd
Three First National Plaza
Suite 3200
70 West Madison Street
Chicago, Illinois 60602
(312) 372-1121

State of Illinois)
) SS
County of Lake)

AFFIDAVIT

I, DONALD H. KELLER, state the following under oath:

1. I am the Vice President of North Shore Gas Company ("North Shore") and am authorized by North Shore to respond to the Request for Information ("Request") served upon North Shore by the United States Environmental Protection Agency ("USEPA") regarding the Outboard Marine site in Waukegan, Illinois.

2. I have made or caused to be made a review of our company's records and records from the old North Shore Gas Company ("Gas Company") to locate all records that might be relevant to the Request. In 1947, the Gas Company went out of the manufactured gas business for which the Request seeks information. The recollections from that business pertain to a period that ended 43 years ago and many employees from this period are deceased or incapacitated. As a result, I am not aware that any former Gas Company employees are able to provide information that is relevant and responsive to the Request. North Shore intends, however, to continue to attempt to obtain any such information from former Gas Company employees and, if such information exists, supplement this Response.

3. North Shore's only business activities at the Property described in the Response are the annual inspection for cathodic protection and North Shore's maintenance activities related to the gas distribution pipes located in its pipeline easements. These operations do not involve waste-related activities.

4. I hereby certify that based on North Shore's review as described in its Response, the Response reflects, at minimum, North Shore's diligent searches and inquiry as required by the Request.

Donald H. Keller

Donald H. Keller
Vice President

Subscribed and sworn to me
this 30th day of March, 1990.

Jean Richardson

Jean Richardson
Notary Public
3001 Grand Avenue
Waukegan, Illinois 60085

My commission expires on January 16, 1992

"OFFICIAL SEAL"
Jean Richardson
Notary Public, State of Illinois
My Commission Expires 1/16/92

EXHIBITS FOR NORTH SHORE'S RESPONSE TO USEPA REQUEST

#	YEAR	DESCRIPTION OF EXHIBIT
A	1990	This List of Exhibits
B	1927	Agreement among Baehr, Elgin Joliet & Eastern Railroad, Johnson Motors and City of Waukegan
C	1941	Conveyance document for transfer of corporate assets from North Shore Coke Company ("Coke Company") to North Shore Gas ("Gas Company") and list of personal property transferred
D	1941	Conveyance document for the transfer of the 42.24 acre parcel from Coke Company to Gas Company
E	1941	Gas Company, Coke Company and North Continent Utilities Corp. Plan of Reorganization and SEC's report on Plan
F	1947	Sales Agreement, correspondence and resolution of Gas Company Board of Directors for sale of coke plant to Waukegan Coke
G	1947	Permanent and temporary pipeline easements to Gas Company from Waukegan Coke
H	1947	Gas Company's petitions and amendment to petition to Illinois Commerce Commission ("Ill.C.C.") for change to natural gas distribution and approval of coke plant sale
I	1947	Ill.C.C. Orders approving Gas Company's petition for approval of coke plant sale and change to natural gas distribution; certificate of convenience and necessity allowing Gas Company to construct natural gas distribution mains
J	1947	Warranty deed and bill of sale for transfer of Property and coke plant to Waukegan Coke
K	1947 - 1948	Correspondence between Gas Company and General Motors regarding proration and payment of property taxes for Property

L	1947	Correspondence regarding Gas Company's grant of land to City of Waukegan for purpose of building road
M	1927; revised in 1948	Map entitled "Elgin Joliet & Eastern R.R. Plan" -- shows Waukegan Coal Co. and Petit Salt Co. adjacent to slips to Main Channel (west of Coke Company) and American Steel & Wire Co. to the south
N	1948	Map of "Coke Plant at Lake Front"; 8 1/2" x 11"
O	1927	Baehr Engineers' drawing entitled "General Scheme of Development for North Shore Coke & Chemical Company"
P	1920s - 1940s	Engineering book drawings regarding gas distribution lines
Q	1974 - 1977	North Shore Gas Company ("North Shore") drawing showing then-current uses in coke plant area; e.g., Johnson Motors
R	1980	North Shore drawing detailing gas lines in old coke plant area
S	1940	Duff & Phelps 125 page report on Gas Company and Coke Company reorganization
T	1944 - 1949	Selected excerpts from Gas Company annual reports and financial summaries regarding resale of coke byproducts and conversion to natural gas
U	1937	Opinion of law firm of Hall & Hulse covering title to real estate
V	1949 - 1989	License agreements, maps, entry permits, etc., regarding installation and maintenance of natural gas pipelines
W	1957	Ahmed, G. Munir, "Manufacturing Structure and Pattern of Waukegan-North Chicago," University of Chicago Press, 1957, pp. 26-29
X	1957	Ahmed, Figs. 20, 22 and 23 (enlarged photographs, the latter of which depicts "Chevrolet" painted on foundry stack at Property)

Y	1963 and later amendments	North Shore's Articles of Incorporation
Z	1989	North Shore's bylaws
AA	1985 - 1989	North Shore's Securities and Exchange Commission Form 10-K for the past 5 years

Exhibit B

THIS AGREEMENT, Entered into by and between ELGIN, JOLIET AND EASTERN RAILWAY COMPANY, an Illinois corporation, (hereinafter referred to as the "Railway Company"), the JOHNSON MOTOR COMPANY, a Delaware corporation, (hereinafter referred to as the "Johnson Company"), WILLIAM A. BAEHR, an individual, (hereinafter referred to as "Baehr"), and the CITY OF WAUKEGAN, a Municipal corporation, (hereinafter referred to as the "City"), WITNESSETH:

THAT, WHEREAS, the Railway Company is the owner of real estate bordering on Lake Michigan, and lying south of the property of the North Shore Sanitary District, in the South half of Section Fifteen (15), Township Forty-five (45) North, Range Twelve (12) East of the Third Principal Meridian, in Lake County, Illinois, and north of the property of the City of Waukegan, in the north half of Section Twenty-two (22), of the same Township and Range, on the south, which real estate is suitable for the location of industries; and,

WHEREAS, the Johnson Company has agreed to buy from the Railway Company the southerly portion of said real estate lying between Lake Michigan and the center line of the excavated channel, consisting of approximately twelve and forty-three one-hundredths (12.43) acres, and to erect and operate thereon a manufacturing plant, on condition that all of the above parties hereto join in the execution and delivery of this agreement;

and,

WHEREAS, Baehr has agreed to buy from the Railway Company the portion of said real estate adjoining the part to be conveyed to the Johnson Company, and lying immediately north of the same, and consisting of approximately forty-two and twenty four one-hundredths (42.24) acres, and to cause to be erected and operated thereon a plant for the manufacture of the products and by-products of coal, on condition that all of the above parties hereto join in the execution and delivery of this agreement; and,

WHEREAS, it is desired by the City that the location of these industries upon this property be secured, and at the same time that the water front and all of the riparian rights along all of the above property shall be acquired by it for the purpose of the establishing and maintaining of a water front park and a recreation beach for the use of the inhabitants of the City of Waukegan; and,

WHEREAS, numerous conferences have heretofore been had between representatives of all of the parties hereto in order to secure, if possible, the advantages to be derived from the location of these and other industries upon this property, and at the same time to secure to the City the site for said park and beach; and, WHEREAS, as a culmination of such conferences, on or about October 8th, 1926, Mr. A. F. Banks, President of the Railway Company, addressed to Honorable L. J. Yager, Mayor of the City, a letter, a copy of which, marked "Exhibit A", is hereto attached and made a part hereof; and,

WHEREAS, at a regular meeting of the Council of the City of Waukegan, held October 11th, 1926, at 8 P.M., a resolution was adopted accepting the proposition incorporated in the said letter of the Railway Company, a copy of which resolution, marked "Exhibit B", is attached hereto and made a part hereof;

NOW, THEREFORE, in consideration of the premises, the Railway Company, the Johnson Company and Baehr for themselves, their respective heirs, successors and assigns, hereby severally agree to sell to the City of Waukegan at any time within five (5) years from this date a strip of land one hundred (100) feet wide along their respective shore lines of Lake Michigan, as said shore lines at that time may be, extending together from the property of the North Shore Sanitary District, above mentioned, to the present property of the City of Waukegan, above mentioned, at the price of Thirty-five Hundred Dollars ($3500.00) per acre, including in said sale and conveyance aforesaid a grant of all the riparian rights of the Grantors appurtenant thereto, on condition that not less than sixty (60) days prior to the expiration of said period of five (5) years from this date the City shall severally notify the respective owners of said land of its election to purchase under this option, and thereupon a joint survey shall promptly be made to determine the shore line of Lake Michigan along said property as of the date of such survey, and within sixty (60) days after such notice the purchase price shall be paid by the City and sufficient deeds of conveyance delivered by the respective owners, and upon the failure of the City to give such notice or join in such survey or to make full payments within such period, this option shall cease and determine. The Railway Company, the Johnson Company and Baehr agree further that in all future conveyances of portions of such real estate along the lake front to be acquired by them respectively, they will make proper reservations to protect the City in its said option.

The City agrees that immediately upon the acquisition of the above described strip of land it will open and maintain a road thereon in a condition passable for automobiles and trucks bearing reasonable loads, extending the entire length of the property conveyed, and will in addition make provision for the extension and maintenance of such a road across the property of said North Shore Sanitary District to the extension of Dahringer Road.

The City further agrees that for the construction, reconstruction, maintenance or repair of the said road to be constructed by the City upon said one hundred (100) foot strip, as herein provided, it will never levy upon the adjacent property any special assessment or special tax to pay the cost thereof, or of any part thereof.

The City further agrees that it will at once abandon the proceedings for the opening and extension of Gillette Avenue into and across the property of the Railway Company, and will rescind any action heretofore taken with reference to same, and it further agrees that it will never open any street or alley, or make any public improvement in, upon or across the said property of the Railway Company, its successors or assigns, which lies between the north line of Madison Street extended east on the south and Duhringer Road upon the north, excepting in or upon the said strip of land one hundred (100) feet wide, after the same has been conveyed to the City, as herein provided.

The City further agrees to provide for connections with its water mains and sewers by and for the benefit of all owners and occupants from time to time of the said property now owned by the Railway Company, as aforesaid, its successors and assigns, lying between the north line of said Madison Street extended on the south and Dahringer Road upon the north, and that no charge shall be made therefor other than for the actual cost of such extensions and connection as shall be made at the request of the respective owners or occupants thereof.

The said Railway Company hereby grants to the said City for the benefit of the inhabitants thereof, the right and easement to use the strip of land hereafter described for all proper street purposes and as a part of Springer Road, upon the condition that the said Railway Company shall at all times have the right, and the said Railway Company expressly reserves the right, to maintain, repair, use and operate its present railroad tracks and railroad facilities across said strip of land and to construct, maintain, repair, use and operate such additional tracks and railroad facilities across said strip of land as it may desire at any time and from time to time and to change the location of all such tracks and railroad facilities at any time and from time to time, all as freely as if this grant had not been made.

The said City expressly agrees that any telegraph, telephone or electric light wires and any wires, pipes, conduits or structures of any kind constructed by it or by its permission upon said strip of land over the tracks and railroad facilities of the Railway Company, or its successors and assigns, shall be constructed and maintained at proper and safe clearance distance and at the clearance distance prescribed by the Illinois Commerce Commission, or by the body having jurisdiction of such clearance, above the tracks and railroad facilities of said Railway Company, its successors and assigns. If the City shall grant to any person, firm or corporation any permit to construct any such wires, pipes, conduits or structures along such strip of land, its said permit shall be subject to the provisions herein contained.

The strip of land to be a part of Dahringer Road, as above provided, is described as follows:

Commencing at the Northeast corner of the Northwest quarter of the Southwest quarter of Section Fifteen (15), Township Forty-five (45) North, Range Twelve (12) East of the Third Principal Meridian, in the City of Waukegan, Waukegan Township, Lake County, State of Illinois; thence westerly with and along the north line of said quarter quarter section four hundred seventy-three and seventeen one-hundredths (473.17) feet to a point; thence southwesterly along a line making a southeasterly angle of ninety-six (96) degrees and fifty-six (56) minutes with last described course eight hundred forty-seven and seven-tenths (847.7) feet to a point of beginning; thence easterly along a line making a northeasterly angle of eighty-three (83) degrees and four (4) minutes with last described course one hundred and forty-three one-hundredths (100.43) feet to a point; thence southwesterly along a line making a southwesterly angle of sixty-nine (69) degrees and forty-three (43) minutes with last described course twenty-one and thirty-two one-hundredths (21.32) feet more or less to a point; thence easterly along a line making a northeasterly angle of sixty-nine (69) degrees and forty-three (43) minutes with last described course, four hundred seventy-five and seventy-six one-hundredths (475.76) feet more or less to a point on the east line of said quarter quarter section; thence northerly with and along the east line of said quarter quarter section one hundred (100) feet to a point; thence westerly along a line parallel to the first and third courses of property herein described five hundred fifty-nine and seven one-hundredths (559.07) feet to a point; thence southwesterly along a straight line eighty and fifty-nine one-hundredths (80.59) feet more or less to the point of beginning, and containing one and twenty-five one-hundredths (1.25) acres, more or less.

The said City agrees that it will open as a public street Dahringer Road, of the same width as the width of the above described strip, along a line which shall be an extension westerly of the above described strip of land to Sand Street and along a line running northerly from the easterly end of the above described strip of land to the northerly line of the property now owned by the North Shore Sanitary District and thence running easterly adjacent to or partly or wholly upon the property now owned by said North Shore Sanitary District to Lake Michigan.

This contract shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

This agreement shall not be effective until approved by the Illinois Commerce Commission.

IN WITNESS WHEREOF, the ELGIN, JOLIET AND EASTERN RAILWAY COMPANY, JOHNSON MOTOR COMPANY, and the CITY OF WAUKEGAN have caused this instrument to be executed by their respective proper officers thereunto duly authorized, and their respective corporate seals to be hereunto affixed, and the said WILLIAM A. BAEHR has hereunto set his hand and seal, this 14th day of January, A.D. 1927.

ELGIN, JOLIET AND EASTERN RAILWAY COMPANY

By (Signed) A. P. Banks
President

Attest: (Signed) F. E. Koonts
Secretary

JOHNSON MOTOR COMPANY

By (Signed) Warren Ripple
President

Attest: (Signed) C. R. Van Sickle
Secretary

(Signed) William A. Baehr (SEAL)

CITY OF WAUKEGAN

By (Signed) Louis J. Yager
Mayor

Attest: (Signed) J. H. Marseilles
Clerk

XXX-H

EXHIBIT A.

AFB-M

October
6th
1926.

Honorable L. J. Yager,
Mayor of the City of Waukegan,
Waukegan, Illinois.

Dear Sir:—

Some time ago the Elgin, Joliet and Eastern Railway Company made a tentative agreement to sell to the Johnson Motor Company approximately ten acres of its land immediately north of the government property and east of the channel at Waukegan, and to Mr. Wm. A. Baehr and his associates for a by-product coke oven plant approximately thirty acres lying immediately north of the ten acre tract. Since that time there have been numerous conferences between the representatives of the industries mentioned, of the Elgin, Joliet and Eastern Railway Company, of the City of Waukegan, of the Chamber of Commerce of Waukegan and others relating to the desire of the people of Waukegan for a lake front park extending along the lake shore from the government property northerly to the intersection of Dahringer Road with the lake shore, and the desire of the industries mentioned and of the Railway Company to preserve all of the property which the Railway Company now owns or is interested in at that place for railroad, dock, shipping and industrial purposes. The parties have not agreed in their views.

It seems to us, however, that it is important and very desirable that we settle upon some plan that will be as nearly satisfactory to everybody concerned as possible. We sympathize with the desire of the people of Waukegan for a lake front park. We think, however, that the development of industries along the channel leading from the harbor as now constructed and as it may be extended, is more important to the City of Waukegan, as well as to the Railway Company than the location of a park at the particular spot referred to. However, if the people of Waukegan do not agree with us we very much want to find a way, if possible, to secure for the people of Waukegan what they want without destroying the industrial development which we are interested in and which we think the people of Waukegan ought to be interested in.

We, therefore, propose that a contract be entered into between the Railway Company and the City of Waukegan covering the matters hereafter stated, and that this contract be approved by the Chamber of Commerce and any other organization representing the sentiment of the people, in order that it may be known whenever any question arises in the future, that the plan adopted had the approval of all concerned and that good faith requires its observance.

In this connection we think it is important to preserve a brief record of the various matters which were taken into consideration in making the agreement. Therefore, before stating the plan which we have in mind, and which we hope will be agreed to, we briefly mention the various suggestions that were brought out and discussed in the many meetings which we have all attended.

The various suggestions brought out in the many discussions were as follows: We do not think it important to show who urged the various suggestions. We think it important only to record the suggestions which were raised and discussed.

1. From a business point of view, the location of Waukegan upon Lake Michigan is of no advantage unless a harbor be maintained with facilities for industries to receive and ship freight over the lakes.

2. Such industries must also have railroad connections with sufficient yards and switch tracks so that they may ship and receive freight from and to territories adjacent to and more or less remote from Waukegan.

3. The present Waukegan Harbor is of trifling importance unless a channel be extended to the north with slips and docks on each side for the accommodation of industries. The greater the area of land having access to such slips and docks, the greater is the possible development of business and industries which are of the kind to be benefited by lake transportation. The United States Government will not improve the harbor further unless a greater volume of shipping into the harbor develops. The industries above referred to, particularly the coke oven plant to be built by Mr. Baehr and his associates, will bring a very large tonnage into the harbor. These industries will probably secure the support of the harbor by the Federal Government so much desired.

4. The City of Waukegan ought to have a Lake Front Park.

5. The nearest location for such a park is on the lake

shore immediately north of the Government property.

6. This is true if a road be provided running directly to it by the shortest route; <u>but</u>, such a road would run across the channel, suggested above, and would kill it. The channel could not be extended north of the road. This would limit the land avilable for industrial development so much that the industrial use of Lake Michigan would be of very little importance.

The road would also cut through the railroad yards, practically destroying the railroad's ability to serve industries of any magnitude.

7. This location north of the Government property for a park is part of Waukegan's general city plan and was settled upon a long time ago.

8. If a park is actually acquired and improved at this place and connected with the City by a road which will make it nearest to the City of any possible location, then the hope of industrial development at that place in any large way must be abandoned. The comparative advanta es of a park at this location with a very small industrial development and the advantages of a park at another location with greater industrial development, must be weighed. The City cannot have both the Park with direct connections to the City, and the larger industrial development.

9. The only other possible location of a Lake Front Park would be north of Dahringer Road and perhaps south of that road for a comparatively short distance. This is too far away from the City.

10. It is farther away from the City than the location first suggeste, provided the first location be connected with the City by a direct road. As has been stated, such a direct road would kill the industrial development. If such a direct road be not constructed, and the territory available for channel, slips, docks and railroad yards be preserved for industrial development, then the location north of Dahringer Road is just as near to the City as the location north of the Government property.

11. If the territory accessible to lake transportation by extension of the channel be kept free for industries, how would the Park be reached?

12. If the property available for industries be preserved for such purposes, then access to a Park, located immediately north of the Government property, would have to be along Sand Street to Dahringer Road, and then easterly to the northerly end of such Park, or to a road leading south into such Park. If access to the Park be by means of Dahringer Road, then it would be no farther to a Park located north of Dahringer Road than it would be to a Park located south of Dahringer Road.

13. It has already been determined to open up Gillette Avenue over to the Lake.

14. If this be done, it will kill the industrial development of a considerable area of land, which would otherwise have access to the channel, slips and docks, when extended. If Gillette Avenue were used for access to a Lake Front Park, the

distance to a park immediately north of Government property would be substantially no shorter than to a park located north of Dahringer Road.

15. The City already has the right to use Government property adjacent to the harbor for park purposes. This will be lost if the park be not located adjacent to it.

16. If the park be located north of Dahringer Road, the property of the Sanitary District, lying immediately south of Dahringer Road and along the lake front, could doubtless be used for park purposes by arrangement with the Sanitary District.

17. It is not necessary that the coke oven plant, which it is proposed to build, should extend to the lake shore. If the coke oven plant has access to the channel or slips, where boats may be landed, that is enough.

18. It is expected that the coke oven plant will desire to grow and expand over a number of years. The tract offered to Mr. Baehr and his associates permits of no expansion to the south because the Johnson Motor Company has tentatively bought this land. It would permit of no expansion to the west because of the harbor channel. It would permit of no expansion to the north because, presumably, other industries will be located there. The lake shore, with the possibilities of accretions offers the desired opportunity for expansion. If a park be located along the lake shore at that place, the plant to be built by Mr. Baehr and his associates would be absolutely limited as though by a

stone wall to the area to be sold to him.

19. Why not acquire from the Railroad Company, land extending north and south far enough to furnish ample space for expansion?

20. The narrower the space devoted to a single industry east and west and the longer the space devoted to such an industry north and south along the channel and slips, the fewer the industries which can be served by such channel and slips. The narrower the property north and south, and the longer the property east and west, the greater the number of the industries which can be served by the channel and the slips.

21. The citizens of Waukegan very much want a Lake Front Park and they want it to be convenient and accessible.

22. The question is: Taking the broadest view, what will be best for the City of Waukegan and its citizens? Industries must locate in the City and must grow and expand if the City is to grow and develop and prosper. Do not the citizens of Waukegan want more industries as well as a park? It is through the growth and development of industries in the City that the City becomes financially able to build and equip parks of a kind that can adequately serve the pleasure and enjoyment of its citizens.

Our suggestion is as follows:

(1) A written contract be entered into between the City of Waukegan and the Elgin, Joliet and Eastern Railway Company covering the following matters:

(2) The contract to be authorized by the City Council and approved by the Chamber of Commerce and other organisations which represent the sentiment of the people of Waukegan.

(3) The Railway Company to agree to sell to the City of Waukegan at any time within five years from the date hereof, a strip of land 100 feet wide along the margin of the Lake as it then exists throughout the entire length of the property then owned by the Railway Company between the government property on the south and the North Shore Sanitary District property on the north at $3500.00 per acre. This is the price at which the Railway Company is proposing to sell to the industries referred to the property which they desire.

(4) The Railway Company in any sales that it may make hereafter will include in its contract of sale an agreement by the purchaser to the same effect. Such an agreement will be included in contract of sale with the industries above mentioned and in token of the approval of these industries of this plan, they will join in the contract between the Railway Company and the City of Waukegan.

(5) The City of Waukegan will agree never to open any street or make any public improvement easterly and westerly across the property which the Railway Company owns or is interested in at this place south of Dahringer Road. The City will rescind any action taken for the opening of Gillette Avenue.

(6) The City to agree to open and maintain a road along

the strip to be conveyed to it as above provided.

(7) The City to agree not to levy upon the adjoining property any special assessment for the construction, reconstruction, maintenance or repair of such road.

(8) The City to agree to provide for connections with its water mains and sewers for the benefit of the Johnson Motor Company, Mr. Baehr and his associates and all occupants from time to time of the property now owned or controlled by the Elgin, Joliet & Eastern Railway Company and lying between the property formerly owned by the Government on the south and the property of the Sanitary District on the north.

(9) If you and the City Council and the other organisations above referred to approve of this plan a formal written contract can be prepared covering the plan as outlined and doubtless containing additional details.

Both Mr. Ripple, of the Johnson Motor Company, and Mr. Baehr, inform me that as soon as the contract above suggested is executed they are ready to proceed with the construction of their plants.

Yours very truly,

(Signed) A. F. Banks,

President.

EXHIBIT B

WHEREAS a written proposal has been made to the City of Waukegan by the Elgin Joliet and Eastern Railway Company in substance as follows:

1. That the railway company agrees to sell to the City of Waukegan at any time within five (5) years from this date a strip of land One Hundred (100) feet wide along the margin of Lake Michigan owned by the Railway Company between the government property on the South and the North Shore Sanitary District property on the North at Thirty Five Hundred and no/100 Dollars ($3500.00) per acre, which agreement shall be contained in any sales of land that the railway company may make hereafter to be agreed upon by any purchaser of such land from the railway company;

AND WHEREAS said proposal contains further provision that the City of Waukegan shall agree never to open any street or make any public improvement Easterly or Westerly across the property which the railway company owns or is interested in North of Madison Street and South of Dahringer Road, and that the City will rescind any action heretofore taken for the opening of Gillette Avenue;

AND WHEREAS it is further provided that the City shall agree to open and maintain a road along the strip of ground to be conveyed by it adjacent to the lake shore, and that the City shall agree not to levy upon the adjacent property any special assessment for the construction, re-construction, maintenance or repair of said road, and upon the further condition that the City shall agree to provide for connections with its water mains and sewers for the benefit of all owners and occupants from time to time of the property now owned or controlled by the Elgin Joliet and Eastern Railway Company lying between the property formerly owned by the government on the South and the property of the Sanitary District on the North.

NOW, THEREFORE, BE IT AND IT IS HEREBY RESOLVED by the City Council of the City of Waukegan that said proposal of the Elgin Joliet and Eastern Railway Company be accepted upon the condition that said contract to be entered into shall also make provisions for the opening of the road now known as Duhringer Road from Sand Street to the shore of Lake Michigan, and that the conveyance of land One Hundred (100) feet wide along the margin of the lake shall also include reparian rights; and the Mayor is hereby authorized to have prepared said contract to be submitted to the Council for its approval and authority for the execution of said contract in its final form.

ADOPTED this 11th day of October, A. D. 1926.

L. J. Yager
Mayor

ATTEST: J. H. Marseilles
City Clerk

(SEAL)

I, J. H. Marseilles, City Clerk of the City of Waukegan, Illinois, certify that the above is a true and correct copy of the Resolution adopted by the City Council of the City of Waukegan, at their regular Council meeting, held Monday, October 11, 8 P.M. 1926.

(Signed) J. F. Marseilles
City Clerk

(SEAL)

KNOW ALL MEN BY THESE PRESENTS, that the Chamber of Commerce and other representative organizations of the City of Waukegan, subscribers hereto, by authority of their respective Boards of Directors and Trustees, have hereunto affixed their signatures and corporate seals in evidence of their approval of the execution by the City Council and other officials of the City of Waukegan of the foregoing and attached agreement between Elgin, Joliet and Eastern Railway Company, an Illinois corporation, the Johnson Motor Company, a Delaware corporation, William A. Baehr, an individual, and the City of Waukegan, a municipal corporation, dated the 14th day of January A. D. 1927, and as evidence that at this time the entire situation dealt with in the said agreement has been carefully considered, and that it is deemed in the public interest that the City execute and deliver the said agreement in order to induce the said Johnson Company and the said Baehr to locate the industries as described, and in order to preserve the land now owned by said Railway Company as described in said agreement for use for channel, slip, railroad and industrial purposes, and in order to make possible the acquisition by the City of the water front and the riparian rights appurtenant thereto for the purposes mentioned, and as a token and assurance that the City of Waukegan and its representative citizens are pledged in good faith to the carrying out of the said agreement.

(Signed) C. E. Staley, President

" Frank T. Foster
Secy.-Mgr.

" Waukegan Rotary Club
By L. J. Wilmot, Pres.

" Olive B. Phelps.
Acting Pres. Waukegan Womans Club.

" Waukegan Kiwanis Club,
M. J. Haney, Pres.

Exhibit C

KNOW ALL MEN BY THESE PRESENTS that North Shore Coke & Chemical Company, a Delaware corporation (hereinafter called the "Chemical Company"), for and in consideration of the sum of One Dollar ($1.00) and other good and valuable considerations, receipt of which is hereby acknowledged, has granted, bargained, sold, conveyed, assigned, transferred and set over, and does hereby grant, bargain, sell, convey, assign, transfer and set over unto North Shore Gas Company, an Illinois corporation (hereinafter called the "Gas Company"), all of the right, title and interest of the Chemical Company in and to its business, properties and contract and other rights (except certain shares of stock, cash and indebtedness to be retained by the Chemical Company as hereinafter mentioned), including particularly, but not by way of limitation, all of the following property owned by the Chemical Company, to-wit:

I.

Real estate, together with the buildings, structures, erections and constructions thereon and all and singular the tenements, hereditaments, reversions, remainders, rights and privileges, and appurtenances thereto belonging or in any way appertaining; lesses and leaseholds, chattels real, easements, rights-of-way, licenses, and equitable interests and other interests in real estate; and franchises, permits, rights and powers of every kind and description.

II.

Personal and mixed property of every kind and character and description, whatsoever and wheresoever situated, including particularly but not by way of limitation, the by-products coke oven plant of the Chemical Company, machinery, tools, apparatus, facilities, appliances, instruments and equipment in any way appertaining to such plant, including particularly but not exclusively all coke ovens, coke bins, coal cars, coke cars, pusher machines, mixers, coal-handling machinery, coke-handling machinery, producers, storage facilities, coke-crushing and conveying and/or elevating equipment, mixer bins, belts, engines, pumps, tanks, quenching stations, stilling basins, coke-cooling apparatus, docks, wharves, feeders, screens, crushers, loading and unloading equipment, gas-treating apparatus, tar and ammonia storage facilities, boilers, piping, water supply equipment, electric wiring, yard switch tracks, coal tracks, sewers, drains, bunkers, cranes, service buildings, offices, warehouses and machine shops.

III.

Cash (except as hereinafter provided), bonds, shares of stock (except as hereinafter provided), obligations and other securities; accounts and bills receivable, judgments and choses in action; machinery, appliances, goods, wares, merchandise, commodities, equipment, apparatus, materials and supplies; trucks, automobiles and automotive transportation equipment; and all gas, oil and other minerals now or hereafter existing upon, within or under any of the real estate described in the preceding Clause I hereof.

IV.

Contracts for the purchase and sale of materials, supplies, equipment and products of the Chemical Company, and all other contracts and rights of the Chemical Company, including particularly but not by way of limitation (a) Agreement dated February 1, 1933, between the Chemical Company and Pickands Mather and Company, a partnership, as amended, (b) Agreement dated January 28, 1928, between the Chemical Company and The Barrett Company, as amended, (c) Agreement dated December 15, 1938, between the Chemical Company and William H. Lewis, of Chicago, Illinois, as amended, (d) Agreement dated August 14, 1941, between the Chemical Company and Waukegan Coal and By-Products Union.

V.

Fire, property damage, public liability and other insurance carried by the Chemical Company.

VI.

The good will of the Chemical Company, including particularly but not by way of limitation, the list of customers of the Chemical Company, and its trade-marks and trade names, it being intended that the property and business shall be transferred and conveyed as a going concern.

Anything herein to the contrary notwithstanding, however, the Chemical Company shall retain all of its right, title and interest in and to the following property, which is not granted, bargained, sold, conveyed, assigned, transferred or set over unto the Gas Company by this instrument, namely:

(a) The shares of capital stock of North Continent Mines, Inc., and The S. W. Shattuck Chemical Company, owned by the Chemical Company;

(b) The sum of $45,000 in cash;

(c) The indebtedness owed by North Continent Mines, Inc. to the Chemical Company, amounting at July 31, 1941, to $233,756.62, and the indebtedness owed by The S. W. Shattuck Chemical Company to the Chemical Company, amounting at July 31, 1941, to $109,622.42.

TO HAVE AND TO HOLD all of the right, title and interest of the Chemical Company in and to its business, properties and contract and other rights of every kind and character granted, bargained, sold, conveyed, assigned, transferred and set over by this instrument unto the Gas Company and its successors and assigns forever.

It is understood that all of the right, title and interest of the Chemical Company in and to its business, properties and contract and other rights of every kind and description granted, bargained, sold, conveyed, assigned, transferred and set over by this instrument, is granted, bargained, sold, conveyed, assigned, transferred and set over subject to all liens, claims and charges thereon.

The Gas Company shall and hereby assumes all liabilities and obligations of every kind and character of the Chemical Company accrued to or existing on the date hereof, including income and excess profits taxes with respect to income of the Chemical Company to the date hereof. The Gas Company shall and hereby assumes all of the obligations of the

Chemical Company under that certain deed dated March 14, 1927, from the Elgin, Joliet and Eastern Railway Company to William A. Baehr.

This instrument is executed and delivered pursuant to, in consummation of, and subject to all of the terms and conditions of the Plan of Reorganization dated November 1, 1941, of the Gas Company, the Chemical Company and North Continent Utilities Corporation. The said Plan provides that it is to be made effective as of May 31, 1941.

IN WITNESS WHEREOF, North Shore Coke & Chemical Company and North Shore Gas Company have each caused this instrument to be executed in its name and behalf by its President or Vice President and by its Secretary or an Assistant Secretary, and its corporate seal to be hereunto affixed and attested by its Secretary or an Assistant Secretary, all on the 23rd day of December, 1941.

NORTH SHORE COKE & CHEMICAL COMPANY

by William B. Baehr
Vice President

by A. J. Faul
Asst Secretary

ATTEST:

A. J. Faul
Asst. Secretary

NORTH SHORE GAS COMPANY

by G. C. Winton
Vice President

by William B. Baehr
Secretary

ATTEST:

William B. Baehr
Secretary

STATE OF ILLINOIS)
) SS.
COUNTY OF C O O K)

I, ______________________, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that on this day personally appeared before me William B. Baehr and A. J. Faul, personally known to me to be the Vice President and Ass't Secretary, respectively, of NORTH SHORE COKE & CHEMICAL COMPANY, a corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such officers, respectively, and acknowledged that they signed, sealed and delivered said instrument as their free and voluntary act as such Vice President and Ass't Secretary, respectively, and as the free and voluntary act of said NORTH SHORE COKE & CHEMICAL COMPANY, for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal this 23rd day of December, 1941.

Notary Public, Cook County, Illinois
My Commission expires ____________

STATE OF ILLINOIS)
) SS.
COUNTY OF C O O K)

I, ______________________, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that on this day personally appeared before me A. C. Winters and William B. Baehr, personally known to me to be the Vice President and ________ Secretary, respectively, of NORTH SHORE GAS COMPANY, a corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such officers, respectively, and acknowledged that they signed, sealed and delivered said instrument as their free and voluntary act as such Vice President and ________ Secretary, respectively, and as the free and voluntary act of said NORTH SHORE GAS COMPANY, for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal this 23rd day of December, 1941.

Notary Public, Cook County, Illinois
My Commission expires ____________

LIST OF PERSONAL PROPERTY TRANSFERRED BY THE CHEMICAL COMPANY TO THE GAS COMPANY

Investments - Stock - First National Bank of Waukegan . . $	700.00
Cash:	
Managers' Fund	2,625.11
Paymasters' Account	1,000.00
Petty Cash Funds	94.9
Accounts Receivable:	
Trade	40,687.4
Affiliated Companies:	
Great Northern Utilities Company	16.00
North Shore Coke & Chemical Company (cash held for account of North Shore Gas Company)	31,082.6
Miscellaneous	71.2
Inventories:	
Residuals in stock - Coke - Oven Plant	80,118.1
Manufacturing materials and supplies - Coke-Oven Plant.	374,979.6
Miscellaneous stock - Coke-Oven Plant	6,015.8
Deferred Charges:	
Prepaid Insurance	2,074.2
Expenses in re Plan of Reorganization.	28,412.4
Cash in Closed Banks:	
Waukegan National Bank-Superintendent's Account	3,287.7
" " " -Paymaster's Account	380.3
" " " -General Fund	136.4
First National Bank -Waukegan (Restricted Fund) . . .	310.1
Inter-Company Obligations:	
Accounts Payable to North Shore Coke and Chemical Company	59,608.2
Unadjusted Credit - Portion of Profit on Joint First Mortgage Bonds reacquired and held in treasury, claimable by North Shore Coke and Chemical Company	4,987.0
Deferred credit - Clearing account - Merger (Cash transferred from North Shore Coke & Chemical Company)	291,633.7
TOTAL	$928,171.

LAND, BUILDINGS, STRUCTURES, MACHINERY AND EQUIPMENT OF THE CHEMICAL COMPANY TRANSFERRED TO THE GAS COMPANY BOOK VALUES AS OF DATE OF TRANSFER

Land, Buildings and Structures

Classification		Amount
Land	$	171,347.79
Docks, Tracks, Roadway and Fences		346,716.18
Coke Handling Structures		15,201.97
By-Products Buildings		5,771.71
Power Plant Buildings		96,778.61
General Office Buildings		83,756.61
Machine Shop		18,310.73
Service Buildings		13,347.07
Miscellaneous Structures		138.00
Water Supply System		43,996.22
Coke Ovens		1,144,188.65
Total		$1,939,553.54

Machinery and Equipment

Boiler and Boiler Plant Equipment	$	205,879.04
Electric Power Equipment		141,970.17
Producer Plant Equipment		113,018.69
Coal Handling Equipment		182,257.86
Coke Handling Equipment		366,787.82
Purification Equipment		29,238.33
By-Products Equipment		12,690.40
Office Furniture and Equipment		17,046.65
Automobile Equipment		3,400.28
Machine Shop Equipment		9,356.96
Laboratory Equipment		13,201.88
Miscellaneous Equipment		20,383.36
Service Building Equipment		74.82
Total		$1,115,273.79

Total land, buildings and structures	$1,939,553.54
Total machinery and equipment	$1,115,273.79
Grand total	$3,054,827.33

LIST OF LIABILITIES ASSUMED BY NORTH SHORE GAS COMPANY IN CONNECTION WITH THE TRANSFER

Accounts Payable:	
William A. Baehr Organization, Inc. (an affiliate...$	1,290.19
Other..	5,643.86
Accrued Salaries and Wages..............................	9,919.77
Accrued Taxes:	
General..	27,000.62
Retailers' Occupational Taxes..........................	199.82
Federal and State Unemployment Insurance...............	2,149.69
Federal Old Age Benefit................................	553.32
Federal Income...	51,736.33
Reserves:	
Uncollectible Accounts.................................	725.34
Loss on Deposits in Closed Banks.......................	4,064.58
Inter-Company Obligations:	
Investment - North Shore Coke and Chemical Company Debentures (Principal amount $1,583,700.00).......	1,536,189.00*
Unamortized debt discount and expense - "B".........	47,511.00*
Interest receivable - North Shore Coke and Chemical Company Debentures..............................	31,674.00*
TOTAL	$1,718,657.52

*Note: The Debentures of the Chemical Company were issued by the Chemical Company to the Gas Company in order to furnish a medium by which the Chemical Company paid to the Gas Company its one-third liability on the outstanding Joint Bonds. The Debentures were cancelled by the Gas Company in connection with the transfer of the properties. However, the Gas Company took the properties subject to the Joint Mortgage. The mortgage itself was not removed by the transfer but by an independent step in the Plan which might or might not have occurred.

STATE OF ILLINOIS)
) SS.
COUNTY OF C O O K)

LOUIS S. HARDIN, being first duly sworn, deposes and says that he is a member of the firm of Pam, Hurd & Reichmann, Attorneys at Law, with offices at 231 South LaSalle Street, Chicago, Illinois; that Messrs. Pam, Hurd & Reichmann represented North Continent Utilities Corporation, North Shore Gas Company (hereinafter called the "Gas Company") and North Shore Coke & Chemical Company (hereinafter called the "Chemical Company") in connection with the reorganization of the Gas Company and the Chemical Company pursuant to an order entered by the Securities and Exchange Commission on November 13, 1941, in proceedings before said Commission under the Public Utility Holding Company Act of 1935, No. 54-32; that affiant had general supervision of the legal details relating to the preparation and consummation of said Plan of Reorganization.

Affiant further states that said Plan of Reorganization was finally carried into effect on December [illegible] 1941; that originally it had been intended that said Plan of Reorganization should be carried into effect prior to that time but that due to the happenings at Pearl Harbor on December 7, 1941, and the demoralizing effect of [illegible] incident upon the securities markets, it was impossible to carry out the Plan at an earlier date; that as a result of the happenings at Pearl Harbor, it was necessary at the last minute to revamp and alter many of the [illegible] and provisions of the Plan of Reorganization, and particularly the terms and provisions of the new [illegible] of the Gas Company issued in connection [illegible] refund the old Joint Bonds of the Gas Company and the Chemical Company; that the revamping and alteration of said securities required last-minute approval not only of the Securities and Exchange Commission but also of the Illinois Commerce Commission; and that during the month of December, in which the Plan of Reorganization was finally consummated, it was necessary to work under the greatest possible pressure, necessitating working days, nights and holidays, in order that the Plan might be successfully carried to a conclusion.

Affiant further states that in connection with the closing, revenue stamps were affixed to the new Bonds and Notes which were issued in the reorganization for refunding purposes, and were likewise affixed to the stock books in connection with the issuance of 57,041 shares of the new Common Shares of the Gas Company which were issued in consideration of the acquisition by the Gas Company of the properties and business of the Chemical Company.

Affiant further states, however, that about two weeks ago, for the first time, his attention was called to the fact that Mr. Goldstine, a Revenue Agent of the Internal Revenue Department, was contending that the Gas Company had failed and neglected to affix and cancel certain revenue stamps which should have been affixed and cancelled in connection with certain parts of the Plan of Reorganization, as follows:

1. Original issuance stamps on the issue of 77,314 of the new Common Shares of the Gas Company issued upon the recapitalization of the Gas Company.

2. Transfer stamps on the transfer of said 57,041 new Common Shares of the Gas Company from the Chemical Company to the holders of the old Preferred Stock of the Chemical Company and the holders of the old Preferred Stock of the Gas Company.

3. Transfer stamps on the deed of conveyance from the Gas Company to the Chemical Company.

Affiant states that he has no recollection at this time of having prior to this time considered the necessity of affixing and cancelling revenue stamps in connection with the transactions mentioned under paragraphs 2 and 3 above. The necessity of affixing and cancelling revenue stamps in connection with the transaction mentioned under paragraph 1 was considered at the time and it was determined that no stamps were required.

Upon further consideration of said transactions at this time, it seems to affiant that revenue transfer stamps should be affixed and cancelled in connection with the conveyance of real estate from the Gas Company to the Chemical Company; that transfer stamps should likewise be affixed in connection with the transfer of said 57,041 new Gas Company Common Shares from the Chemical Company to the Preferred Stockholders of the Chemical Company and the Preferred Stockholders of the Gas Company; however, that no stamps are required in connection with the original issuance of said 77,314 new Common Shares of the Gas Company.

In any event, affiant states that the failure to cancel and affix stamps in connection with said transactions, if stamps are in fact required, was due entirely to inadvertence and not to an intention in any manner to deprive the United States of any amounts due in connection therewith. Affiant further alleges, in justification for such inadvertent omission, if stamps are in fact required, that the entire transactions were carried into effect under extreme and unusual pressure. In addition, since the plan was carried into effect the firm of Messrs. Pam, Hurd & Reichmann has been engaged to a large extent in legal work relating, directly or indirectly, to the war effort, and, due to loss and change from time to time in personnel, the firm has continuously been working under great pressure, which has made it impossible to review carefully the transactions which have been completed in the manner which would ordinarily be done in normal times.

Further affiant saith not.

Louis S. Hardin

Subscribed and sworn to before me, this 16th day of August, 1943.

Nina K. Pringle
Notary Public

My commission expires

Oct. 21, 1946

(SEAL)

Exhibit D

NORTH SHORE COKE & CHEMICAL COMPANY, a corporation of the State of Delaware, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable considerations, receipt of which is hereby acknowledged, does hereby grant, bargain, sell, convey and quit-claim to NORTH SHORE GAS COMPANY, an Illinois corporation, the following described real estate, to-wit:

Commencing at the southwest corner of the northwest quarter of Section Twenty-two (22), Township Forty-five (45) north, Range Twelve (12) east of the Third Principal Meridian, Waukegan Township, Lake County, Illinois; thence northeasterly, making a northeast angle of eighty-nine degrees and twenty-nine minutes (89° 29') with the east and west center line of said Section Twenty-two (22), to a point on the north line of City Street, sixty-six (66) feet from, measured at right angles, the east and west center line of said Section Twenty-two (22); thence east with and along the north line of said City Street, parallel to the east and west center line of said Section Twenty-two (22), five hundred eighty-five and thirty-seven one-hundredths (585.37) feet to a point on the northwesterly line of Harbor Street; thence northeasterly, with and along said northwesterly line of Harbor Street and making a northeasterly angle of seventy-five degrees, twelve minutes and ten seconds (75° 12' 10") with last described course extended east one hundred nineteen and forty-three one-hundredths (119.43) feet to a point; thence east, parallel to and one hundred eighty-one and forty-seven one-hundredths (181.47) feet from, measured at right angles, the said center line of Section Twenty-two (22), three hundred seventy-three and sixty-one one-hundredths (373.61) feet to a point; thence northeasterly, making a northeasterly angle of sixty degrees, one minute and fifteen seconds (60° 1' 15") with last described course extended east four hundred seventeen and forty-four one-hundredths (417.44) feet to the point of beginning; thence east parallel to, and five hundred forty-three and six one-hundredths (543.06) feet from, measured at right angles, the said center line of Section Twenty-two (22), and making a southeasterly angle of one hundred nineteen degrees, fifty-eight minutes and forty-five seconds (119° 58' 45") with last described course, thirteen hundred eighty-nine and forty-nine one-hundredths (1389.49) feet, more or less, to a point on the shore line of Lake Michigan, (this course to be known as the first course,; thence northwesterly, with and along said shore line to an intersection with a line running parallel with and one-thousand four hundred and twenty (1420) feet north of, measured at right angles, the south line of the property hereby conveyed, being the said first course, (this course along said shore line to be known as the second course), said shore line being approximately as follows, running northerly and making a northwesterly angle of eighty-eight degrees and fifty-five minutes (88° 55') with said first course, one hundred seventy- nine and sixteen one-hundredths (179.16) feet to a point; thence northeasterly, continuing along said shore line and making a northeasterly angle of four degrees, fifty-nine minutes and fifteen seconds (4° 59' 15") with last described course extended northerly six hundred seventy-five and five-tenths (675.5) feet to a point; thence continuing northeasterly, with and along said shore line and making a northeasterly angle of four degrees, fifty-two minutes and forty-five seconds (4° 52' 45") with last described course extended northerly, five hundred seventy-three and sixty-seven one-hundredths (573.67) feet to a point, (end of description of shore line); thence west, twelve hundred fifty and thirty-nine one-hundredths (1250.39) feet to a point, (this course to be known as the third course), the last described course also being parallel to and one thousand four hundred twenty (1420) feet north of, measured at right angles, the south line of property herein described; thence southwesterly, making a southeasterly angle of one hundred degrees, thirty-one minutes and thirty-six seconds (100° 31' 36") with last described course, (being the said third course), one thousand four hundred thirty and two-tenths (1430.2) feet to a point, (this course to be known as the fourth course); thence continuing southwesterly and making a southwesterly angle of nineteen degrees, twenty-seven minutes and nine-seconds (19° 27' 9") with last described course extended southerly, (being the fourth course), sixteen and three one-hundredths (16.03) feet to the point of beginning, (this course to be known as the fifth course), said tract containing forty-two and twenty-four one-hundredths (42.24) acres, more or less, together with all accretions thereto and the riparian rights appurtenent thereto, but exclusive of the railroad tracks of the Elgin, Joliet and Eastern Railway Company upon said premises, as to the materials thereof;

The foregoing tract is conveyed subject to zoning and building ordinances, the existing channel across said premises, and to all the terms, conditions and covenants contained in the certain deed of Elgin, Joliet and Eastern Railroad Company dated March 14, 1927 (recorded March 16, 1927, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 262 of Deeds, page 610, as Document No. 295,717), conveying said premises to William A. Baehr, the obligations thereof the North Shore Coke & Chemical Company (a Delaware corporation) assumed as grantee in the certain deed of said William A. Baehr and Mabel S. Baehr, his wife, dated March 14, 1927, (recorded March 16, 1927, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 262 of Deeds, page 608, as Document No. 295,716) as modified or discharged by (i) a certain deed from said corporation to the City of Waukegan, Illinois, dated October 27, 1927 (recorded April 22, 1929, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 335 of Deeds, page 582, as Document No. 335250) conveying a strip of land one hundred (100) feet in width across said property; (ii) a certain deed from the City of Waukegan, Illinois, to said corporation, dated July 30, 1935 (recorded July 31, 1935 in the office of the Recorder of Deeds of Lake County, Illinois, in Book 413 of Deeds, page 277 as Document No. 415306) reconveying the said strip of land one hundred (100) feet in width to the Coke Company, and (iii) a certain deed from said corporation to the City of Waukegan, Illinois, dated July 31, 1935 (recorded August 2, 1935, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 413 of Deeds, page 288, as Document No. 415,382) conveying a perpetual easement to the City of Waukegan to maintain and use a roadway on and along a strip of land fifty (50) feet in width across the above described premises;

together with the buildings, structures, erections and constructions on the above described real estate, and all and singular the tenements, hereditaments and appurtenances thereto belonging or in any way appertaining.

IN WITNESS WHEREOF, NORTH SHORE COKE & CHEMICAL COMPANY has caused this Instrument to be executed by its Vice-President thereunto duly authorized, and its corporate seal to be affixed, and attested by its ________ Secretary, as of the 23rd day of December, 1941.

NORTH SHORE COKE & CHEMICAL COMPANY

By A. C. Winters
Vice-President

ATTEST:

William B. Baehr
Secretary

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, ________________, a Notary Public in and for said County, in the State aforesaid, do hereby certify that on this day personally appeared before me A. C. WINTERS and WILLIAM E. BAEHR, personally known to me to be the Vice-President and ________ Secretary, respectively of NORTH SHORE COKE & CHEMICAL COMPANY, a corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such officers, respectively, and acknowledged that they signed, sealed and delivered said instrument as their free and voluntary act as such Vice President and ________ Secretary, respectively, and as the free and voluntary act of said NORTH SHORE COKE & CHEMICAL COMPANY, for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 23rd day of December, 1941.

Notary Public
Cook County, Illinois

My Commission Expires: ________

NORTH SHORE GAS COMPANY
NORTH SHORE COKE & CHEMICAL COMPANY
NORTH CONTINENT UTILITIES CORPORATION

Exhibit E

PLAN OF REORGANIZATION.

Part I.

INTRODUCTION AND STATEMENT OF PURPOSES

A. The Applicants.

North Shore Gas Company (hereinafter referred to as the "Gas Company"), an Illinois corporation organized July 13, 1908, is a public utility operating company serving with manufactured gas the communities located along the shore of Lake Michigan from the southern boundary of Winnetka to the Illinois-Wisconsin State Line and other communities and rural districts to the west thereof.

North Shore Coke & Chemical Company (hereinafter referred to as the "Chemical Company"), a Delaware corporation organized January 17, 1927, owns a coke oven plant located at Waukegan, Illinois, and is engaged in the production of coke and gas and other related products. The gas manufactured by the Chemical Company for sale is sold to the Gas Company under a gas supply contract between the Gas Company and the Chemical Company dated February 17, 1927, as amended by supplemental agreements dated December 12, 1936, and June 1, 1938, respectively.

The Gas Company and the Chemical Company (hereinafter sometimes referred to collectively as the "Constituent Companies") are subsidiaries of North Continent Utilities Corporation (hereinafter referred to as "North Continent"), a Delaware corporation organized November 3, 1922, which is a registered holding company under the Public Utility Holding Company Act of 1935 (hereinafter referred to as the "Holding Company Act"). North Continent, the Gas Company and the Chemical Company are hereinafter sometimes called the "Applicants."

This Plan was submitted by the Applicants to the Securities and Exchange Commission for its approval under the Holding Company Act, pursuant to an application filed therefor (file number 54-32), and the accompanying report of the Securities and Exchange Commission should be read in connection herewith.

B. Outstanding Securities of the Constituent Companies and Asserted Claims.

SECTION 1. The outstanding securities of the Gas Company, at May 31, 1941, consisted of the following:

Title of Issue	Amount Outstanding	Amount Owned by the Public	Amount Owned by Gas Company	Amount Owned by North Continent
Joint First Mortgage 4% Bonds, Series A, due January 1, 1942*	$4,795,000*	$4,604,000*	$191,000*	None
7% Cumulative Preferred Stock, $100 par value (entitled to $[illegible] per share and accrued dividends on liquidation; redeemable at $110 per share and accrued dividends)	27,956 Shares	27,319 Shares	None	637 Shares
Common Stock, $25 par value	120,000 shares	None	None	120,000 shares**

*Hereinafter referred to as the "Joint Bonds". For the liability of the Gas Company with respect to the Joint Bonds, see Section 4. Since May 31, 1941, namely, as of July 1, 1941, the Gas Company surrendered for cancellation $42,000 in principal amount of the $191,000 principal amount of Joint Bonds owned by it as above mentioned, so that as of July 1, 1941, there were $4,753,000 in principal amount of Joint Bonds outstanding, of which $4,604,000 in principal amount were owned by the public and $149,000 in principal amount were owned by the Gas Company.

**Pledged under Indenture of North Continent (mentioned in Section 3) securing the North Continent First Lien Collateral and Refunding, 5½%, Gold Bonds, Series A, of which $8,491,000 principal amount are at the date hereof owned by the public.

Holders of shares of capital stock of the Gas Company, Preferred and Common, are entitled to one vote for each share held; and in elections for directors shareholders have the right to cumulate their votes.

Interest on the Joint Bonds has been paid through the last matured interest payment date (July 1, 1941); retirements of principal have been made as required by the Indenture (hereinafter referred to) under which the Joint Bonds were issued.

Full dividends on the Preferred Stock were paid through October 1, 1933; on January 2, April 2 and July 2, 1934, partial dividends in the amount of 50¢ per share were paid so that in the year 1934 dividends paid aggregated $1.50 per share; no dividends on the Preferred Stock have been paid since July 2, 1934. Only two dividends have been paid on the Common Stock since January 1, 1917: $1.75 per share (aggregating $210,000) on June 25, 1931, and a like dividend on June 20, 1932.

At May 31, 1941, the accumulated and unpaid dividend arrearages on the 7% Cumulative Preferred Stock amounted to $52.16⅔ per share, or a total of $1,458,371.33.

Annexed hereto, marked Exhibit A and Exhibit B, respectively, are a Balance Sheet of the Gas Company at May 31, 1941, and a Condensed Income Account of the Gas Company for the calendar years 1928 to 1940, both included, and for the twelve-months period ended May 31, 1941.

SECTION 2. The outstanding securities of the Chemical Company, at May 31, 1941, consisted of the following:

Title of Issue	Amount Outstanding	Amount Owned by Public	Amount Owned by the Gas Company	Amount Owned by North Continent
Joint First Mortgage 4% Bonds, Series A, due January 1, 1942*	$4,795,000*	$4,604,000*	$ 191,000*	None
Five-year 4% Debentures, due January 1, 1942*	1,597,700*	None	1,597,700*	None
7% Cumulative Preferred Stock, $100 par value (entitled to $100 per share and accrued dividends on liquidation; redeemable at $110 per share and accrued dividends)	15,000 shares	1,279 shares	None	13,721 shares**
Common Stock, $1 par value	200,000 shares***	1,200 shares***	None	198,150 shares

*For the liability of the Chemical Company with respect to the Joint Bonds and the Debentures, see Section 4. The Joint Bonds referred to in this Section 2 are the same Joint Bonds referred to in Section 1. Since May 31, 1941, namely, as of July 1, 1941, the Gas Company surrendered for cancellation $42,000 in principal amount of the $191,000 in principal amount of Joint Bonds owned by it as above mentioned, so that as of July 1, 1941, there were $4,753,000 in principal amount of Joint Bonds outstanding, of which $4,604,000 in principal amount were owned by the public and $149,000 in principal amount were owned by the Gas Company. Since May 31, 1941, the Chemical Company has retired $14,000 in principal amount of Debentures, so that as of July 1, 1941, there were $1,583,700 in principal amount of Debentures outstanding and owned by the Gas Company.

**12,500 of these shares pledged under Indenture of North Continent (mentioned in Section 3) securing the North Continent First Lien Collateral and Refunding, 5½%, Gold Bonds, Series A, of which $3,491,000 principal amount are at the date hereof owned by the public.

***650 of the 200,000 outstanding shares were held in the treasury. 675 additional shares have been acquired by the Company since May 31, 1941, increasing the amount held in the treasury at the date hereof to 1,325 shares, and reducing the amount owned by public to 525 shares.

Holders of shares of capital stock of the Chemical Company, Preferred and Common, are entitled to one vote for each share held.

Dividends at the rate of 7% per annum on the Preferred Stock were paid from July 1, 1927 to January 2, 1932 (dividend payments through July 2, 1928 were charged to capital as interest during construction, except that only two-thirds of the July 2, 1928 payment was so charged); partial dividends of $1.75 per share were paid in 1932 and in 1934; no dividends were paid in 1933. Dividends in the full amount of $7 per share were paid in the years 1935, 1936 and 1937. Dividends were paid in December, 1936 (in the amount of $5.25 per share) and in January, 1937 (in the amount of $14.00 per share) in connection with the refunding referred to Section 4 hereof: a dividend in the amount of $5.25 per share was paid in June, 1937; upon payment of the June, 1937 dividend all dividend arrearages were discharged by payment. Partial dividends in the amount of $5 per share were paid in each of the years 1938 and 1939. On June 25, 1940, a partial dividend of $2.50 per share was paid, and no dividends have been paid since that date. The only dividend paid on the Common Stock was a dividend in the amount of $20,000 (10 cents per share) paid on April 1, 1930.

At May 31, 1941 the accumulated and unpaid dividend arrearages on the 7% Cumulative Preferred Stock amounted to $11.41⅔ per share, or a total of $171,250.00.

Interest on the Debentures of the Chemical Company has been paid through the last matured interest payment date (July 1, 1941); retirements of principal have been made as required by the Debenture Agreement (hereinafter referred to) under which the Debentures were issued.

Annexed hereto, marked Exhibit C and Exhibit D, respectively, are a Balance Sheet of the Chemical Company at May 31, 1941, and a Condensed Income Account of the Chemical Company for the period from June 1 to December 31, 1928, for the calendar years 1929 to 1940, both included, and for the twelve-months period ended May 31, 1941.

SECTION 3. North Continent at the date hereof owns (a) all of the outstanding Common Stock and 637 shares (approximately 2.28% of the total) of the Preferred Stock of the Gas Company, and (b) 198,150 shares of Common Stock (in excess of 99% of the total) and 13,721 shares of the Preferred Stock (approximately 91.47% of the total) of the Chemical Company. All of the Common Stock of the Gas Company, and 12,500 shares of Preferred Stock of the Chemical Company, owned by North Continent, are among the assets pledged under its Indenture, dated January 1, 1928, as collateral security for its outstanding First Lien Collateral and Refunding, 5½%, Gold Bonds, Series A, due January 1, 1948, of which at May 31, 1941, $3,491,000 in principal amount were outstanding in the hands of the public and $329,500 in principal amount were held by North Continent in its treasury. City National Bank and Trust Company of Chicago, a national banking association, is the Trustee under said Indenture of North Continent.

SECTION 4. In the refunding of $3,855,000 principal amount of First Mortgage Five Per Cent Gold Bonds, Series A, of the Gas Company, which matured February 1, 1937, the Gas Company and the Chemical Company jointly issued $5,100,000 aggregate principal amount of the Joint Bonds dated January 1, 1937 and maturing January 1, 1942. The Joint Bonds were issued under an Indenture of the Constituent Companies to City National Bank and Trust Company of Chicago, Trustee, dated January 1, 1937. Said Indenture constitutes a first mortgage (subject to tax and certain other liens and encumbrances) on the real estate, plants, distributing systems and equipment of the Constituent Companies. The Joint Bonds are the joint and several obligations of the Constituent Companies and each of the Constituent Companies is fully liable to the holders of the Joint Bonds for the entire principal of and interest on the Joint Bonds. As of May 1, 1941, City National Bank and Trust Company of Chicago resigned as Trustee under said Indenture and Continental Illinois National Bank and Trust Company of Chicago was appointed and is now acting as successor Trustee thereunder.

All of the proceeds of the sale of the Joint Bonds were received by the Gas Company. Of such proceeds approximately one-third was applied by the Gas Company to the purchase by it from the Chemical Company of the latter's Debentures in the original principal amount of $1,700,000, which were issued in accordance with the provisions of a Debenture Agreement, dated January 1, 1937, entered into by and between the Chemical Company and City National Bank and Trust Company of Chicago, Trustee. Thus two-thirds of the proceeds derived from the sale of the Joint Bonds was primarily for the benefit of the Gas Company and one-third primarily for the benefit of the Chemical Company. Of its one-third of the proceeds, the Chemical Company applied (a) approximately $1,400,000 to the redemption of its First Mortgage Bonds, maturing March 1, 1947, then outstanding (which had to be called for redemption to permit the Chemical Company to join in the issuance of the Joint Bonds), and (b) $100,000 to part payment of the cost of purchase and installation of a producer (to increase the supply of gas to the Gas Company) at the Chemical Company's plant. As of May 1, 1941, City National Bank and Trust Company of Chicago resigned as Trustee under said Debenture Agreement and Continental Illinois National Bank and Trust Company of Chicago was appointed and is now acting as successor Trustee thereunder.

In connection with the issuance of the Joint Bonds, the Gas Company and the Chemical Company entered into a written arrangement as to the manner in which, as between themselves only, provision should be made for the payment of the Joint Bonds. The Gas Company assumed the sole obligation upon the entire issue of Joint Bonds and agreed to make all payments of interest and principal thereon; the Chemical Company, by issuance of its Debentures and sale thereof to the Gas Company, obligated itself to provide the latter with funds to meet one-third of the interest and principal requirements of the Joint Bonds. To that end, the Debentures of the Chemical Company mature at the same time, bear the same rate of interest and carry a substantially proportionate debt service fund as do the Joint Bonds. The arrangement further provides that the Debentures cannot be disposed of in any manner by the Gas Company without the written consent of the Chemical Company.

SECTION 5. In the proceedings before the Securities and Exchange Commission under the Holding Company Act relating to the Plan, intervention was allowed by the Commission on behalf of a Committee representing holders of the Preferred Stock of the Gas Company (hereinafter called the "Preferred Stockholders' Committee") consisting of the following persons, namely: John O. Guthrie, Chairman; Albert W. Browne, Emmet Moroney, William Remy, Fred W. Stryker and Joseph B. Wilson (this Committee being more fully described in the letter transmitting this Plan). In the proceedings, the Committee asserted in behalf of the holders of the Preferred Stock of the Gas Company that said Preferred Stockholders or the Gas Company had certain claims and rights against North Continent, the Chemical Company, William A. Baehr Organization, Inc., a service company subsidiary of North Continent, and the officers and directors, past and present, of said three corporations and of the Gas Company, growing out of or in connection with (a) the organization of the Chemical Company, the gas supply contract between the Gas Company and the Chemical Company hereinbefore mentioned and the price of gas between the two companies, (b) management fees charged to the Gas Company by the William A. Baehr Organization (both before and after incorporation), and (c) various other matters alleged to be to the detriment of the Gas Company, including the issuance of certain bonds of the Gas Company in 1929 and 1931 and the disposition of the proceeds thereof. The Preferred Stockholders' Committee, in addition, contended in the proceedings for the application of certain theories of valuation in determining the relative values of the properties of the Gas Company and the properties of the Chemical Company to be purchased by the Gas Company as mentioned in Section 6(c), as bearing upon the proportion of new Common Shares of the Gas Company to be received under the Plan by the holders of the presently outstanding shares of Preferred Stock of the Gas Company.

Intervention was also allowed by the Commission on behalf of City National Bank and Trust Company of Chicago, as Trustee under the Indenture of North Continent referred to in Section 3 (under which are pledged, among other things, 12,500 of the shares of Preferred Stock of the Chemical Company). Said Trustee in the proceedings contested the claims and rights asserted by the Preferred Stockholders' Committee. The Trustee also in the proceedings contended for the application of certain theories of valuation in the determination of the relative values of the properties of the Gas Company and the properties of the Chemical Company to be purchased by the Gas Company as mentioned in Section 6(c), as bearing upon the proportion of new Common Shares of the Gas Company to be received under the Plan by the Chemical Company.

C. *Purposes of the Plan.*

SECTION 6. The Plan is designed—

(a) to simplify the capital structure of the Gas Company so that it will have outstanding but one class of stock, namely, new Common Shares;

(b) to distribute voting power fairly and equitably among the security holders of the Gas Company in accordance with the provisions of Section 11(b)(2) of the Holding Company Act;

(c) to vest in the Gas Company all the right, title and interest of the Chemical Company in and to the business, properties, and contract and other rights, of every kind and character, of the Chemical Company, other than the indebtedness and the shares of capital stock of North Continent Mines, Inc. and of The S. W. Shattuck Chemical Company, hereinafter mentioned in Section 10, owned by the Chemical Company, and other than the sum of $45,000 in cash which will be retained and disposed of by the Chemical Company as hereinafter provided in Section 10;

(d) as a necessary incident to the matters referred to above, to settle, compromise and release the claims and rights mentioned in Section 5;

(e) to refund the Joint Bonds by issuance of securities of the Gas Company alone;

(f) to liquidate and dissolve the Chemical Company upon refunding of the Joint Bonds; and

(g) to simplify the structure of the holding company system of which the Constituent Companies are a part.

Part II.

PROVISIONS OF THE PLAN

SECTION 7. The Plan involves three steps as set forth in Sections 8, 9 and 10 (see Section 14).

SECTION 8. *Step 1.* The charter of the Gas Company shall be amended so that the authorized capitalization of the Gas Company will consist of 150,000 shares, all of one class, of the par value of $15 per share (herein called "new Common Shares"). The presently issued and outstanding 27,319 shares of Preferred Stock of the Gas Company (being all of said shares outstanding other than 637 shares thereof owned by North Continent), including all accumulated but unpaid dividends thereon and all other claims and rights in connection therewith, shall be reclassified as and exchanged for, in the aggregate, 77,314 new Common Shares. All the presently issued and outstanding shares of Common Stock, and said 637 shares of Preferred Stock, of the Gas Company held by North Continent (said shares of Common Stock being pledged with the Trustee under the Indenture of North Continent as mentioned in Section 3) shall be surrendered for cancellation. Upon the execution and filing of an appropriate amendment to the charter of the Gas Company the holders of the presently outstanding Preferred Stock and Common Stock of the Gas Company shall cease to be holders thereof, and the holders of said 27,319 shares of Preferred Stock shall become holders of new Common Shares upon the basis hereinbefore mentioned.

Immediately following the recapitalization of the Gas Company, the Chemical Company shall sell, transfer and assign to the Gas Company all of its right, title and interest in and to its business, properties, and contract and other rights, of every kind and character, except as mentioned in Section 6(c), in exchange for 57,041 new Common Shares of the Gas Company. The Gas Company shall take said business, properties and contract and other rights subject to all liens, claims and charges thereon, and shall assume all liabilities and obligations of every kind and character (other than the Debentures, and the interest thereon, hereinafter mentioned) of the Chemical Company accrued to or existing on the date of transfer, including income and excess profits taxes with respect to income of the Chemical Company to the date of transfer. The Debentures of the Chemical Company owned by the Gas Company and the unpaid accrued interest thereon (see Section 4) shall be canceled and the Gas Company alone shall refund the Joint Bonds (see Section 9).

As hereinbefore mentioned and as will be noted from the table in Section 1, North Continent owns 637 shares of Preferred Stock of the Gas Company. These shares are not pledged under the Indenture of North Continent (mentioned in Section 3). In order to assist in the working out of the Plan, and in consideration of the settlement, compromise and release hereinafter provided for of the claims and rights mentioned in Section 5, as against the corporations therein referred to (i) North Continent has agreed to, and shall, surrender to the Gas Company for cancellation, as hereinbefore provided, said 637 shares of Preferred Stock of the Gas Company owned by North Continent, and (ii) North Continent and the Chemical Company have agreed to, and shall, deliver or cause to be delivered pro rata to the holders (other than North Continent) of the Preferred Stock of the Gas Company 4,643 of the 57,041 new Common Shares of the Gas Company to be received by the Chemical Company as hereinbefore mentioned (see Section 10(d)(iii)). Therefore, the holders of the outstanding shares of Preferred Stock of the Gas Company (other than North Continent) will receive not only their pro rata interest in the 77,314 new Common Shares into which their shares of Preferred Stock are to be reclassified as hereinbefore mentioned, but also said 4,643 shares, or a total of 81,957 new Common Shares of the Gas Company, constituting approximately 61% of the total number of new Common Shares to be outstanding upon consummation of the Plan, and being on the basis of 3 new Common Shares for each share of Preferred Stock held.

In addition, Mr. William A. Baehr (President, stockholder and a Director of North Continent and of the Gas Company, President and a Director of the Chemical Company, and also, until recently, President and a Director of William A. Baehr Organization, Inc.) has agreed (i) to pay $2.50 per share in cash to the holders (other than North Continent) of the presently outstanding shares of Preferred Stock of the Gas Company (and any escrow and other distribution expenses in connection therewith), and (ii) to distribute, pro rata, to and among such holders, through the medium of scrip certificates, 741 new Common Shares to be received by him on account of 247 of the 347 shares of Preferred Stock of the Gas Company owned by him and to pay any Federal transfer taxes in connection therewith. The payment and distribution to stockholders will be made concurrently with the delivery to said holders of the new Common Shares to be received by them upon the recapitalization of the Gas Company as hereinbefore provided. Mr. Baehr has agreed to make the proposed payment and distribution in order to facilitate the carrying out of the Plan and in consideration of the settlement, compromise and release, hereinafter provided for, of the claims and rights mentioned in Section 5 as against the officers and directors therein referred to. Mr. Baehr denies the validity of said claims and rights and of any alleged liability of himself, or of any of said officers or directors, to the Gas Company or to the holders of its Preferred Stock.

Upon the consummation of *Step 1*, therefore, each holder (other than North Continent and other than Mr. Baehr with respect to said 247 shares mentioned in the next preceding paragraph) of presently outstanding shares of Preferred Stock of the Gas Company will receive, for each share of said stock, three new Common Shares of the Gas Company, scrip certificates (see Section 10(d)(iv)) for 741/27072 new Common Shares, and $2.50 in cash.

The issues dealt with in the Plan, and particularly this Section 8 — the determination of the relative values of the properties of the Gas Company and those of the Chemical Company to be acquired by the Gas Company, and the consideration of the alleged claims and rights of the Gas Company and the holders of shares of its Preferred Stock mentioned in Section 5 — involve difficult and complicated questions of fact and law. The provisions of *Step 1* reflect what is believed to be a reasonable overall settlement and compromise of the conflicting views of the Applicants, the Preferred Stockholders' Committee, and the Trustee under the Indenture of North Continent on these questions. Consequently, upon the consummation of *Step 1* the alleged claims and rights of the Gas Company and of the holders of shares of its Preferred Stock against the corporations and persons mentioned in Section 5 shall be *ipso facto* released and discharged.

SECTION 9. *Step 2.* Concurrently with or immediately following the carrying out of *Step 1* as provided in Section 8, the Gas Company will issue and sell its new first mortgage bonds and notes, and with the proceeds of such securities, together with other funds of the Gas Company, will retire the Joint Bonds by redemption before maturity at par and accrued interest or by payment (the Joint Bonds mature January 1, 1942). It is contemplated that the new securities so to be issued and sold by the Gas Company will be substantially as follows (subject to the provisions of the last paragraph of this Section 9):

1. $3,700,000 aggregate principal amount of First Mortgage Bonds to be dated approximately the date of the issuance thereof, to bear interest at the rate of 4% per annum, to mature twenty years after date and to be redeemable at par and accrued interest plus a premium graduated downward, the initial premium not to exceed 8% of principal. The new First Mortgage Bonds will be issued under and secured by a Trust Indenture constituting a first mortgage lien upon the properties (with certain exceptions) of the Gas Company (including properties to be acquired from the Chemical Company). It is contemplated that said Trust Indenture will, *inter alia*, in effect provide substantially as follows:

   (a) Bonds may be issued under the Trust Indenture (in addition to the initial issue of $3,700,000) from time to time against the deposit of cash, the retirement of previously outstanding bonds (other than through operation of the debt service fund hereinafter mentioned or any sinking or other similar fund) or the acquisition of bondable property (as defined in the Trust Indenture) to the extent of 60% of the net expenditures (as therein defined) for, but not to exceed 60% of the fair value of, such bondable property. There will be a further provision that no additional bonds (other than the bonds issued in lieu of retired bonds within two years prior to the maturity of such retired bonds and bearing a rate of interest no higher than that borne by such retired bonds) may be issued unless the net earnings (as defined in the Trust Indenture) for a period of twelve consecutive calendar months within the fifteen calendar months immediately preceding application for the authentication and delivery by the Trustee of such additional bonds shall be at least equal to two and one-half times the interest requirements for one year on bonds then outstanding (other than bonds to be refunded) plus those then applied for. Appropriate provisions will be contained in the Indenture for taking into account as earnings of the Gas Company, during the first fifteen months, earnings of the Chemical Company or the properties thereof to be acquired by the Gas Company.

(b) Any additional bonds issued in accordance with the provisions outlined in subparagraph (a) may be of the same series as the $3,700,000 principal amount of bonds initially issued, or may be of other series. Bonds of other series shall bear such rate of interest, shall mature at such date or dates, shall be entitled to the benefit of such sinking fund or funds, shall be redeemable at such prices, and shall contain such other provisions, as shall be determined by the Board of Directors of the Gas Company prior to the issuance thereof.

(c) A debt service fund will be provided for the initial issue of $3,700,000 of bonds. This fund will provide for semi-annual payments of $124,000, the initial payment to be made seven and one-half years following the date of issuance of the bonds. Each such semi-annual debt service fund payment is to be used first for the payment of interest then due on the outstanding bonds and the balance is to be applied to the retirement of bonds either by purchase at not to exceed, or by redemption at, the then existing redemption price. The Indenture will contain appropriate provisions for a proportionate increase in the amount of the semi-annual debt service fund payments in the event of issuance of additional bonds of the initial series.

(d) In the Indenture the Company will covenant, among other things, to maintain its property in good repair and to permit inspection of its property by an independent engineer, at the request of the Trustee, from time to time, but only at intervals of not less than five years. In addition, provisions will be contained in the Indenture to provide for the annual deposit by the Company with the Trustee, as a Depreciation Fund, of an amount equal to the greater of the following two amounts, namely:

(i) a sum equal to the amount of depreciation set up upon the books of the Company for the preceding calendar year, or

(ii) the sum of $185,000 plus or minus 1¾% of net property additions or net property retirements, as the case may be, subsequent to the date of the mortgage.

Provisions will be contained whereby the Company may take credit against the amount so to be deposited with the Trustee for sums expended (with certain exceptions or limitations) for (1) construction or acquisition of bondable property (as defined), (2) retirement of the Serial Notes hereinafter mentioned, and (3) retirement of First Mortgage Bonds. It will be provided that credit for bondable property expenditures may be carried over for a period of not more than five years as credits against subsequent payments due in accordance with this covenant. Provisions will be contained in the Indenture for the application of moneys in the Fund substantially in the same manner as the proceeds of released property.

(e) The Company will covenant that it will not declare or pay any dividends (other than stock dividends) or purchase or acquire (other than by exchange for other shares) any shares of its capital stock, except out of surplus earnings arising subsequent to May 31, 1941.

2. $700,000 aggregate principal amount of Series Notes to be dated of even date with the new First Mortgage Bonds and to mature $50,000 semi-annually beginning six months from the date of issuance. The Serial Notes shall bear interest at such rate or rates (the average rate to be not more than 3½% per annum) as, under market conditions at the time of sale, will permit such sale on the most favorable terms to the Gas Company. They are to be issued under a Trust Agreement which will, *inter alia*, in effect provide substantially as follows:

(a) The issue of Serial Notes shall be limited to $700,000 aggregate principal amount.

(b) No additional debt maturing more than one year from the date of creation or assumption thereof may be created or assumed except additional bonds issued under the provisions of the Company's Trust Indenture hereinbefore referred to under 1, securing the Company's First Mortgage Bonds.

(c) Provisions shall be made permitting the redemption of the Serial Notes either as a whole, or in lots constituting not less than all of the then outstanding Notes of any one or more maturities, at par and accrued interest plus a premium based on the number of 6-months periods between the date of redemption and the regular maturity date, the premium in no case to exceed 7% of principal.

(d) The Trust Agreement will contain appropriate provisions for the protection of the Serial Notes in the event that the Trust Indenture securing the First Mortgage Bonds is not in existence throughout the life of the Serial Notes.

In view of possible changes in market conditions prior to the consummation of the Plan, it may become advisable to change the terms or character of the new securities to be issued to refund the Joint Bonds; and in view of the impending maturity of the Joint Bonds and the necessity for prompt action, it is understood that holders of securities of any class, by assenting to the Plan, assent to the issuance and sale of such new first mortgage bonds and notes of the Gas Company, and to such provisions to be contained in the bond indenture and note agreement, as the Board of Directors of the Gas Company (subject to the approval of the Preferred Stockholders' Committee and of the Trustee under the Indenture of North Continent) shall deem advisable (even though differing from the provisions referred to in paragraphs 1 and 2 above), subject only to the following limitations: (i) the principal amount of securities to be issued to refund the Joint Bonds shall not exceed the principal amount of the Joint Bonds to be refunded, (ii) the interest rate on the new bonds and the average interest rate on the new notes to be issued to refund the Joint Bonds shall not exceed 4½% per annum, (iii) if it becomes necessary or advisable to sell at a discount the securities to be issued to refund the Joint Bonds, the total discount shall not exceed 5% of the aggregate principal of said new securities, and (iv) the premium payable upon redemption of any such new securities shall not exceed 8% of principal.

SECTION 10. *Step 3.* Concurrently with or as soon as may be conveniently done after the carrying out of *Steps 1* and *2*, as provided in Sections 8 and 9, the Chemical Company shall be liquidated (and thereafter dissolved) in the following manner (subject to the provisions of the last paragraph of this Section 10):

(a) In view of the small number of outstanding shares of Common Stock of the Chemical Company not owned by North Continent (525 shares in all), and in view of the expense of determining the exact interest, if any, of the holders of shares of Common Stock in the assets of the Chemical Company, it has been deemed advisable, as a practical matter, arbitrarily to pay to the holders of said shares of Common Stock not owned by North Continent $5.00 a share in cash, although it is deemed that on liquidation of the Chemical Company through sale of its assets holders of shares of Common Stock of the Chemical Company would receive (after payment of expenses of liquidation and the preferential amounts to which the holders of the Preferred Stock of the Chemical Company would be entitled upon liquidation) substantially less than that amount if anything at all. Such cash payment is to be made from the sum of $45,000 to be retained by the Chemical Company as provided in Section 6(c).

(b) The remaining part of the sum of $45,000 retained by the Chemical Company as hereinbefore provided (after paying to the holders of the 525 shares of Common Stock of the Chemical Company the amount provided in the next preceding paragraph hereof and after paying or providing for necessary expenses of liquidation and dissolution not to exceed $2,500) will be transferred and paid to North Continent Mines, Inc. as a contribution to its working funds.

(c) The indebtedness owed by North Continent Mines, Inc. to the Chemical Company, amounting at July 31, 1941, to $233,756.62, shall be forgiven by the Chemical Company as a capital contribution by the Chemical Company to its wholly owned subsidiary. The indebtedness of The S. W. Shattuck Chemical Company to the Chemical Company, amounting at July 31, 1941, to $109,622.42, shall be sold to North Continent for an amount in cash equal to the amount of said indebtedness including interest, which cash shall be distributed *pro rata* to the holders of the outstanding shares of Preferred Stock of the Chemical Company. North Continent, in paying the purchase price for said indebtedness, shall be entitled to credit in an amount equal to the amount of said purchase price distributable to it as the holder of shares of Preferred Stock of the Chemical Company. Pending consummation of the Plan, no further advances will be made by the Chemical Company to either of said other corporations and neither of said other corporations shall repay any of its said indebtedness to the Chemical Company as of July 31, 1941.

(d) The remaining assets of the Chemical Company, consisting of the new Common Shares of the Gas Company to be received by the Chemical Company as mentioned in Section 8 (after deducting therefrom the 4,643 shares as mentioned in the third paragraph of said Section), and all of the outstanding shares of capital stock of North Continent Mines, Inc., a Wyoming corporation, and 60% of the outstanding shares of capital stock of The S. W. Shattuck Chemical Company, a Colorado corporation, will (subject to the provisions hereinafter contained in this Section 10) be distributed pro rata to the holders of the outstanding shares of Preferred Stock of the Chemical Company, as follows:

(i) The Chemical Company owns all of the 100,000 outstanding shares of capital stock of North Continent Mines, Inc. The number of outstanding shares will be changed to 15,000 (or a multiple thereof) shares, so that upon distribution the holders of the 15,000 outstanding shares of Preferred Stock of the Chemical Company will receive a whole share or shares of the capital stock of North Continent Mines, Inc. for each share of said Preferred Stock.

(ii) The Chemical Company owns 300 (60%) of the 500 outstanding shares of capital stock of The S. W. Shattuck Chemical Company (there being only 500 shares authorized by its charter). Under the laws of the State of Colorado the vote or consent of the holders of not less than two-thirds of the outstanding shares of capital stock is necessary to amend the charter. In the event it is possible to secure such two-thirds vote or consent, the charter of The S. W. Shattuck Chemical Company will be amended to provide for 25,000 (or a multiple thereof) outstanding shares of capital stock, all of one class, so that upon distribution the holders of the 15,000 outstanding shares of Preferred Stock of the Chemical Company will receive a whole share or shares of the capital stock of The S. W. Shattuck Chemical Company for each share of said Preferred Stock. However, in the event it becomes impossible so to amend the charter, the outstanding shares of capital stock of The S. W. Shattuck Chemical Company will be distributed either through the medium of fractional shares, or scrip certificates evidencing fractional shares, or otherwise as shall be deemed feasible by the Board of Directors of the Chemical Company, in order that each preferred shareholder of the Chemical Company may receive his pro rata interest in the stock of The S. W. Shattuck Chemical Company.

(iii) As will be noted from the table in Section 2, out of 13,721 shares of Preferred Stock of the Chemical Company owned by North Continent, 1,221 shares are not pledged under the Indenture of North Continent (mentioned in Section 3). North Continent, in connection with the settlement, compromise and release provided for in the third paragraph of Section 8, has agreed to waive its rights to receive any new Common Shares of the Gas Company, upon the liquidation of the Chemical Company, on account of these 1,221 unpledged shares. Therefore, the 57,041 new Common Shares of the Gas Company to be received by the Chemical Company as provided in the second paragraph of Section 8, after deducting therefrom the 4,643 new Common Shares mentioned in the third paragraph of Section 8, will be distributed pro rata with respect to the shares of Preferred Stock of the Chemical Company other than said 1,221 unpledged shares. Fractional shares will be evidenced by scrip certificates.

(iv) Any scrip certificates evidencing fractional shares issued under the Plan shall be non-voting and non-dividend bearing, and shall expire and become void unless combined with other scrip certificates evidencing a whole share or shares and exchanged for a whole share or shares on or prior to January 2, 1945. However, holders of scrip certificates, upon exchanging their scrip certificates for a whole share or shares, will be entitled to any dividends paid prior to exchange upon the whole share or shares received by them.

It is understood that if prior to distribution by the Chemical Company of the shares of capital stock of North Continent Mines, Inc., and of The S. W. Shattuck Chemical Company, owned by it as hereinbefore mentioned, the Chemical Company shall sell all the shares and/or indebtedness owned by the Chemical Company in either or both of said corporations, or all the assets of either or both of said corporations shall be sold, the net proceeds of any such sale or sales to which the Chemical Company is directly or indirectly entitled will be distributed to the holders of the shares of Preferred Stock of the Chemical Company *pro rata* in accordance with their holdings in lieu of the shares of the corporation or corporations whose shares or assets are thus sold, and the provisions of paragraphs (c) and (d) above may be changed to comply with the terms of sale.

The distributions hereinbefore in this Section 10 provided for are to be in complete cancellation or redemption of all of the shares of capital stock of the Chemical Company in accordance with a plan of liquidation to be adopted by the Chemical Company under which the distribution and transfer of all property under the liquidation is to be completed within a time to be specified in such plan. (It is contemplated that such liquidation will be completed concurrently with, or at least within ninety days after, the consummation of *Steps 1* and *2;* but in any event the initial steps in the liquidation will be begun prior to or concurrently with the consummation of *Steps 1* and *2*, and the liquidation will be carried through to completion as quickly as possible).

In the event for any reason any of the foregoing steps in the liquidation of the Chemical Company cannot be carried out, the Company will be liquidated through judicial proceedings or in such other lawful manner as shall be determined by the Board of Directors of the Chemical Company.

SECTION 11. All agreements between the Constituent Companies in effect prior to consummation of the Plan, including particularly the gas supply contract, shall be terminated.

SECTION 12. All fees, commissions and other remuneration in connection with the Plan to whomsoever paid shall, to the extent required by law, be subject to approval by the Securities and Exchange Commission and the Illinois Commerce Commission. The fees, expenses and remuneration thus to be paid include the fees, expenses and remuneration of the Applicants and of City National Bank and Trust Company of Chicago, as Trustee, and of the Preferred Stockholders' Committee, and of their respective counsel, auditors, engineers and assistants, all of which fees, expenses and remuneration the Applicants, as a part of the Plan, have agreed to pay if and when the Plan is consummated, and if and to the extent approved, and as allocated among the Applicants, by the Securities and Exchange Commission (except that the Chemical Company shall not be obligated to pay any such fees, commissions or other remuneration from the assets to be retained by it as mentioned in Section 6(c) other than as provided in Section 10(b)). The Indenture of North Continent (mentioned in Section 3) provides that the Trustee thereunder shall have a first lien upon the trust property for its reasonable expenses, counsel fees and compensation, which expenses, counsel fees and compensation North Continent therein agrees to pay on demand.

SECTION 13. There shall be secured, before the Plan is consummated, the following assents to and approvals of the Plan, or applicable portions thereof (subject to the provisions of the last sentence of this Section 13), namely:

(a) The approval of the Securities and Exchange Commission under the Holding Company Act;

(b) The approval of the Illinois Commerce Commission;

(c) The assent of the holders of not less than two-thirds of the presently outstanding shares of the Preferred Stock of the Gas Company, voting as a class;

(d) The assent of the holder of all of the presently outstanding shares of Common Stock of the Gas Company. North Continent owns all of said outstanding shares of Common Stock but such shares are pledged under the Indenture of North Continent which contains certain provisions relating to the voting of said shares;

(e) The assent of the holders of a majority of the presently outstanding shares of Preferred and Common Stocks of the Chemical Company. North Continent owns 198,150 of the outstanding 198,675 shares (not including 1,325 treasury shares held by the Chemical Company) of Common Stock of the Chemical Company and as such holder will assent to the Plan. North Continent also owns 13,721 of the outstanding 15,000 shares of Preferred Stock of the Chemical Company, but of said 13,721 shares 12,500 are pledged under the above mentioned Indenture of North Continent which contains certain provisions relating to the voting of said pledged shares;

(f) The assent of the holders of a majority of the presently outstanding shares of Preferred Stock of the Chemical Company exclusive of the shares owned by North Continent or by any of the officers or directors of the Gas Company, the Chemical Company or North Continent;

(g) The assent of the Trustee under the Indenture of North Continent (referred to in Section 3);

(h) The approval of a court, upon application therefor by the Securities and Exchange Commission, if the Commission shall have been requested to make such application in accordance with the provisions of Section 11 (e) and Section 18 (f) of the Holding Company Act.

SECTION 14. Whenever there shall have been procured the assents and approvals to the Plan mentioned in Section 13 (if and to the extent required as set forth in said Section), the Boards of Directors of the Gas Company, the Chemical Company and North Continent shall declare the Plan effective and take such action as shall be necessary or desirable to carry out the Plan. When the Plan shall have been declared effective, as aforesaid, it shall be binding, to the extent permitted by law, upon all persons affected by the Plan, including all stockholders of the Gas Company and of the Chemical Company whether or not they have assented to the Plan.

It is recognized that from the nature of the problems involved in the refunding of the Joint Bonds it may become impossible or inadvisable, on account of market or other conditions, to consummate the transactions provided for in *Step 2*, and in such event the complete liquidation of the Chemical Company as provided for in *Step 3* may of necessity be postponed until the refunding of the Joint Bonds. It is understood, therefore, that by consenting to the Plan security holders consent to the carrying out of the transactions provided for in *Step 1* even though it becomes impossible to carry out the transactions provided for in *Step 2* (and hence the transactions provided for in *Step 3* are not carried out), in which event the Gas Company, as between it and the Chemical Company, shall be solely liable on the Joint Bonds, and shall indemnify the Chemical Company from any liability thereon.

SECTION 15. The form of the amendment to the Articles of Incorporation of the Gas Company and of any amendments to its by-laws, the forms of stock certificates and other securities, and the forms of all agreements, instruments and other documents which may be necessary or proper for the purpose of carrying out the Plan shall (consistent with the provisions of the Plan) be determined by the Boards of Directors of the Gas Company, of the Chemical Company, and of North Continent, subject to the approval of counsel for the Preferred Stockholders' Committee, and for the Trustee under the Indenture of North Continent, and also subject, to the extent provided by law, to the approval of the Securities and Exchange Commission, of the Illinois Commerce Commission, and of any other body or authority having jurisdiction in the premises.

SECTION 16. In connection with or as soon as may be conveniently done after the carrying out of *Step 1* as provided in Section 8, appropriate corporate action will be taken whereby the Board of Directors of the Gas Company will consist of the following persons:

James L. Allen (Partner of Booz, Fry, Allen & Hamilton, Management Engineers).
Business Address—135 S. LaSalle Street, Chicago.
Residence Address—Highland Park, Illinois.

L. H. G. Bouscaren (Vice-President of Stone & Webster Engineering Corporation) (Director of the Gas Company).
Business Address—33 S. Clark Street, Chicago.
Residence Address—Winnetka, Illinois.

John O. Guthrie (Associated with Bowes & Co., Inc., Insurance Underwriters of Lloyds of London) (Chairman of Preferred Stockholders' Committee).
Business Address—135 S. LaSalle Street, Chicago.
Residence Address—Newport Township, Lake County, Illinois.

James L. Martin (Chairman of the Board of Directors of Ashland Oil & Refining Company) (Special Agent in Chicago of New York Life Insurance Company).
Business Address—29 S. LaSalle Street, Chicago.
Residence Address—Highland Park, Illinois.

William Remy (General Contractor) (Member of Preferred Stockholders' Committee).
Business Address—Wilmette, Illinois.
Residence Address—Wilmette, Illinois.

P. P. Stathas (Partner of Duff & Phelps, Public Utility Analysts).
Business Address—208 S. LaSalle Street, Chicago.
Residence Address—Deerfield, Illinois.

J. W. Sykes (Vice President and Director of the Chemical Company and Director of North Continent; also Chief Engineer of William A. Baehr Organization, Inc.).
Business Address—231 S. LaSalle Street, Chicago.
Residence Address—Wheaton, Illinois.

John S. Whyte (Treasurer of The Bunting System, Publishers of Trade Publications serving the Hardware Trade).
Business Address—Waukegan, Illinois.
Residence Address—Waukegan, Illinois.

A. C. Winters (Vice President, Treasurer and Director of the Gas Company and of the Chemical Company; also President and Director of William A. Baehr Organization, Inc.; formerly Vice President, Treasurer and Director of North Continent).
Business Address—231 S. LaSalle Street, Chicago.
Residence Address—7628 Crandon Avenue, Chicago.

Of the persons above named, the following (constituting a majority) were originally suggested by the Preferred Stockholders' Committee, namely, James L. Allen, John O. Guthrie, James L. Martin, William Remy and John S. Whyte. The other persons above named were originally suggested by North Continent.

The By-Laws of the Gas Company will provide that the Directors to be elected as herein provided shall hold office until the annual meeting of the shareholders to be held in April, 1943, or until the election and qualification of their respective successors.

In the event any of the above named persons prior to election becomes for any reason unavailable for election as a director of the Gas Company, then such substitute person or persons shall be elected as shall be approved by the Applicants and the Preferred Stockholders' Committee.

Section 17. The statements contained in the Plan are believed by the Applicants to be true and correct but are made without representation or warranty and solely for the purpose of presentation and submission of the Plan as herein provided.

Section 18. The Plan is to be made effective as of May 31, 1941, the date of the annexed Balance Sheets and the last date to which earnings have been included in the annexed Income Statements.

Part III.

EFFECTS AND RESULTS OF THE PLAN

SECTION 19. The capitalization of the Gas Company, upon the consummation of the Plan, will be substantially as follows:

Title of Security	Amount Authorized	Amount Outstanding	Amount Owned by the Public	Amount Owned by North Continent
First Mortgage __% Bonds, Series A, due ________ 1, 1961.*	**	$3,700,000	$3,700,000	None
Serial Notes (to mature $50,000 semi-annually)*	700,000	700,000	700,000	None
Common Shares, par value $15 per share	150,000 shares	134,355 shares	86,821*** shares	47,534*** shares

*Exact amount of Bonds and Notes not now determinable but total amount to be issued to refund the Joint Bonds will not exceed principal amount of Joint Bonds to be refunded. For further information concerning the above Bonds and Notes, including interest rate, maturity, and redemption premium, see Section 9.

**Additional Bonds of Series A and Bonds of other series may be issued subject to the terms of the Indenture.

***To the nearest full share.

Holders of the new Common Shares of the Gas Company will be entitled to one vote for each share held; and in elections for directors shareholders will have the right to cumulate their votes.

Annexed hereto, marked Exhibits E and F, respectively, are a pro forma Balance Sheet, as at May 31, 1941, and a pro forma Condensed Income Statement for the twelve months period ended May 31, 1941, of the Gas Company after giving effect to the consummation of the Plan. The basis of preparation of said pro forma Balance Sheet and Condensed Income Statement and the adjustments reflected therein are set forth therein or in the notes thereto.

NORTH SHORE GAS COMPANY
NORTH SHORE COKE & CHEMICAL COMPANY
NORTH CONTINENT UTILITIES CORPORATION.

Dated November 1, 1941.

ASSETS AND DEFERRED CHARGES

UTILITY PLANT (See note 1):			
Franchises, organization expense, etc.		$ 137,031.65	
Gas plant		6,318,700.98	
Utility plant adjustment accounts		3,823,716.16	
			$10,279,448.79
INVESTMENTS:			
Securities of affiliates—			
Five year 4% debentures of North Shore Coke & Chemical Company due January 1, 1942 (principal amount, $1,597,700), at cost (See note 5)		$1,549,769.00	
Other security investments—			
Securities having no quoted market value, at cost		360.00	
			1,550,129.00
CURRENT ASSETS:			
Cash in banks and on hand		$ 159,334.79	
Accounts and notes receivable—			
Gas consumers	$148,161.31		
Merchandise and jobbing customers (See note 2)	159,050.91		
Other	336.10		
	$307,548.32		
Less: Reserve	23,570.94		
		283,977.38	
Interest accrued on debentures of North Shore Coke & Chemical Company (affiliated company)		26,628.32	
Inventories—			
Merchandise for resale, at cost	$ 62,193.35		
Operating and construction materials and supplies, at cost	82,143.18		
		144,336.53	
Total current assets			614,277.02
OTHER ASSETS:			
Appliances installed in customers' premises under rental purchase contracts (See note 3)		$ 32,173.42	
Debt service fund with trustee of joint first mortgage bonds		3,740.00	
Special deposits		1,840.86	
Notes receivable—not current		520.00	
			38,274.28
DEFERRED CHARGES:			
Unexpired insurance and other prepaid expenses		$ 4,607.51	
Unamortized debt discount and expense (see Note 5)		63,224.74	
Deferred expense re proposed Plan of Reorganization		16,593.29	
Deferred engineering expenses (See note 4)		26,006.21	
Cash in closed banks and restricted funds	$ 5,851.08		
Less: Reserve	5,851.08		
Leasehold improvements in process of amortization over term of lease		7,458.04	
Other deferred charges		10,938.69	
			128,828.48
			$12,610,957.57

NOTE: Dividends in arrears on the 7% cumulative preferred stock

NOTES:

(1) Utility plant, etc. and depreciation reserve—

The utility plant accounts of the company are stated in accordance with the requirements of the Uniform System of Accounts prescribed by the Illinois Commerce Commission, effective January 1, 1938. The system requires that the utility properties shall be stated at original cost (estimated, if not known) at the date first devoted to utility service, and that the difference between the book value of such property and such original cost shall be segregated in separate accounts to be depreciated, amortized or otherwise disposed of as the Commission may approve or direct.

In the reclassification of its utility plant as at December 31, 1939 to conform to the requirements of the above-named system of accounts the company allocated the aggregate actual cost of its tangible property at June 30, 1918 to classified accounts on the basis of an inventory and appraisal of its tangible property made at that date by William A. Baehr, consulting engineer and vice-president in charge of operations of the company. To the account balances thus determined was added the cost of net additions since June 30, 1918, classified as required by the system of accounts. Corrections were made for retirements that had been recorded at the appraised value, which was in excess of allocated cost, and for certain minor errors noted during the study.

The entries made by the company in reclassifying the property accounts resulted in increases to the following accounts, in the amounts stated below:

Utility plant in service	$93,211.13
Reserve for depreciation	90,291.97
Earned surplus	2,919.16

The increase of $93,211.13 in the utility plant in service accounts covered (1) a credit to depreciation reserve of $90,291.97 in adjusting retirements made in prior years, being the excess value assigned to property at dates of retirements over the corrected values determined as a result of the reclassification of the accounts, and (2) a credit of $2,919.16 to earned surplus, being the profit on land and building sold in 1920 and credited to property accounts.

The Illinois Commerce Commission has not passed on the reclassifications made nor has it given any indication as to the disposition of the differences between the book value of the property and the original cost thereof at dates first devoted to utility service.

The balances of the utility plant adjustment accounts, $3,823,716.16, consisting in some instances, of a mixed aggregate of tangible and intangible costs, is summarized as follows:

Excess of cost to former North Shore Gas Company of assets acquired from The Waukegan Gas Light and Fuel Company on November 30, 1900 over the cost of such assets to that company, as follows:			
Cost to former North Shore Gas Company—			
Par value of capital stock issued	$1,000,000.00		
Note payable issued ($400,000 principal amount of first mortgage bonds were issued in 1901 in payment of this note)	400,000.00		
		$1,400,000.00	
Cost of assets to The Waukegan Gas Light and Fuel Company—			
Tangible assets	$ 199,403.83		
Franchise in Waukegan	32,250.00		
		231,653.83	$1,168,346.17
Par value of capital stock issued by Winnetka Gas Company to stockholders of former North Shore Gas Company in excess of capital stock of former North Shore Gas Company previously outstanding upon consolidation of former North Shore Gas Company into Winnetka Gas Company on July 12, 1906. The name of the Winnetka Gas Company was at once changed to the North Shore Consolidated Gas Company and later, in 1912, the name was changed to North Shore Gas Company		$1,000,000.00	
Less: Surplus of former North Shore Gas Company eliminated upon consolidation into Winnetka Gas Company		70,211.16	929,788.84
Notes payable issued by Winnetka Gas Company on July 28, 1908 primarily for a franchise in Winnetka ($800,000 principal amount of bonds of North Shore Consolidated Gas Company were later issued in payment of these notes)			800,000.00
Forward			$2,898,135.01

LIABILITIES, CAPITAL SHARES AND SURPLUS

CAPITAL SHARES:			
7% cumulative preferred stock, $100 par value (entitled to $100 per share and accrued dividends on liquidation; redeemable at $110 per share and accrued dividends)—			
Authorized—30,000 shares			
Issued —27,956 shares			$ 2,795,600.00
6% cumulative preferred stock, $100 par value (liquidation and redemption rights to be fixed when and as issued)—			
Authorized—20,000 shares			
Issued —None			
Common stock, $25 par value—			
Authorized and issued—120,000 shares			3,000,000.00
			$ 5,795,600.00
FUNDED DEBT:			
Joint First Mortgage Bonds (North Shore Gas Company and North Shore Coke & Chemical Company—joint issuers, see note 5)—			
Series "A", 4%, due January 1, 1942:			
Authorized and issued	$5,100,000.00		
Deduct			
Redeemed through debt service fund	305,000.00		
		$4,795,000.00	
Less: Reacquired and held in treasury		191,000.00	
			4,604,000.00
CURRENT LIABILITIES:			
Accounts payable		$ 25,578.25	
Consumers' meter deposits		30,467.35	
Accrued salaries and wages		16,247.84	
Accrued general taxes		78,296.19	
Accrued federal income taxes, including provision of $17,459.63 for 1941 taxes based on Revenue Act of 1941		26,323.93	
Accrued interest		94,086.51	
Due affiliated companies—			
North Shore Coke & Chemical Company	$ 54,364.99		
William A. Baehr Organization, Inc.	2,279.01		
		56,644.00	
Miscellaneous		633.50	
			328,277.57
DEFERRED CREDITS:			
Customers' advances for construction		$ 8,213.70	
Portion of profit on joint first mortgage bonds reacquired and held in treasury at May 31, 1941 claimable by North Shore Coke & Chemical Company (affiliated company) upon retirement of said bonds, per terms of financing agreement		6,986.23	
			15,199.93
RESERVES:			
Depreciation reserve		$1,359,242.16	
Maintenance reserve		7,002.34	
Miscellaneous		3,156.08	
			1,369,400.58
CONTRIBUTIONS IN AID OF CONSTRUCTION			90,580.06
EARNED SURPLUS			407,899.43
			$12,610,957.57

1, 1941 amounted to ($52.16% per share) $1,458,371.33.

Forward		$2,698,135.01
Par value of capital stock issued in 1912 primarily for franchise in City of Elgin		1,000,000.00
Unamortized debt discount and expense consisting of discount and expense on original sales and premiums on redemption of bonds (none of which are now outstanding) capitalized during the years 1901 to 1912		222,274.18
Miscellaneous—Cash received from the treasurer of the company during the months of August, September, October, November and December 1906, concerning which no information is available	$ (99,999.98)	
Less: Miscellaneous expenditures	3,306.96	
		(96,693.02)
Total		$3,822,716.16

In an order dated December 30, 1930, the Public Utilities Commission of Illinois (now Illinois Commerce Commission) found the original cost of the used and useful property of the company (exclusive of going value and cash working capital and supplies) to be $1,800,000. The Commission order does not clearly indicate whether its finding of original cost applies to property at December 31, 1919 or to property at December 30, 1930, the date of the order. The carrying value of the property (exclusive of items constituting the $3,822,716.16 mentioned hereinbefore) at those dates was $1,643,903.38 and $1,776,603.60, respectively.

Depreciation is being provided in accordance with the findings of the Public Utilities Commission of Illinois (now the Illinois Commerce Commission) in the order above mentioned of December 30, 1930 and the company is setting aside annually the sum of $35,000 (on property owned at December 30, 1930) plus 1.75% of all net additions and betterments to the property subsequent to December 30, 1930.

In prior years, the amount of depreciation claimed as a deduction in the company's income tax returns has been in excess of the amount recorded on the books. The returns for the years 1938 and 1939 have been reviewed by the Treasury Department and depreciation claimed therein has been revised to amounts slightly below those recorded on the books.

(2) Accounts receivable—merchandise and jobbing, at May 31, 1941, consist principally of balances due on installment contracts, a substantial portion of which is due after May 31, 1942.

(3) "Appliances installed in customers' premises under rental purchase contracts" represent the unpaid balances on rental contracts entered into prior to June 1, 1937 and the cost only of installations on such contracts made since that date and now in effect, less rentals received thereon. Since June 1, 1937 the company has followed the policy of taking up the profit or loss on such contracts at the time the customer elects either to purchase the appliance or cancel the contract. Such unrealized profit as may be contained in the unpaid balances on contracts entered into prior to June 1, 1937 is deemed immaterial.

(4) Deferred engineering expenses—

During the year 1931 the company incurred expenses of $30,006.21, including fees and expenses of William A. Baehr Organization, Inc. (an affiliated company) in the amount of $12,363.12, in connection with the proposed utilization of natural gas. No portion of the expenses has been amortized. The company has continued the distribution of artificial gas and has adopted no plans in respect to the utilization of natural gas.

(5) Joint First Mortgage 4% Bonds, Series "A", due January 1, 1942, and unamortized debt discount and expense—

On or about January 14, 1937, North Shore Gas Company and North Shore Coke & Chemical Company (an affiliated company) issued and sold jointly $5,100,000 in principal amount of their Joint First Mortgage 4% Bonds, Series "A", dated January 1, 1937 and due January 1, 1942. Under the provisions of an agreement between the companies (made for their own convenience and protection and having no effect upon the rights of the bondholders), North Shore Gas Company assumed the obligation to pay such Joint Bonds and North Shore Coke & Chemical Company sold to North Shore Gas Company $1,700,000 of Five Year 4% Debentures, due January 1, 1942. Such debentures have the same relative provisions as the Joint Bonds.

Two-thirds of the discount ($102,000) plus the company's share of the expenses incidental to the issue and sale of the Joint First Mortgage Bonds is being amortized on a basis which will extinguish the account at maturity of the bonds. The remaining one-third of the discount ($51,000) is carried as an offset to the discount at which the $1,700,000 principal amount of 4% debentures of North Shore Coke & Chemical Company were purchased under the agreement between the companies. As the discount is realized through the retirement of the debentures by North Shore Coke & Chemical Company such discount is applied to reduce the balance of this account which at May 31, 1941 was $47,381.

NORTH SHORE

CONDENSED IN

For the Calendar Years 1928 to 1940, Both Included.

	Twelve Months Ended May 31, 1941	1940	1939	1938	1937	1936
Operating revenues	$1,565,808.92	$1,554,556.46	$1,460,680.01	$1,431,143.27	$1,400,295.27	$1,388,877.01
Operating expenses:						
Operation, maintenance and taxes (other than federal income taxes)	$1,232,756.35	$1,245,651.56	$1,142,845.06	$1,154,254.92	$1,169,346.85	$1,047,453.17
Provision for depreciation	114,424.50	113,373.10	112,287.12	111,811.19	111,016.00	109,752.03
Provision for federal income taxes	22,252.34	11,819.07	13,087.33	2,572.00		8,868.42
Total operating expenses	$1,369,433.19	$1,370,843.73	$1,268,219.51	$1,268,638.11	$1,280,362.85	$1,166,073.62
Operating income	$ 196,375.73	$ 183,712.73	$ 192,460.50	$ 162,505.16	$ 119,932.42	$ 222,803.39
Other income:						
Dividends	$ 12.80	$ 12.80	$ 12.80	$ 9.60		$ 8.00
Interest on 4% debentures of North Shore Coke & Chemical Company (affiliated company)	64,275.00	64,730.00	65,786.00	66,794.00	$ 62,093.34	
Interest on long term debt of and advances to North Continent Utilities Corporation (parent company)					947.51	25,980.91
Miscellaneous interest	6.62			1,495.72	41.75	925.85
Miscellaneous non-operating income	505.60	616.81	631.81	569.96	1,171.07	2,284.99
Total other income	$ 64,800.02	$ 65,359.61	$ 66,430.61	$ 68,869.28	$ 64,253.67	$ 29,199.75
Gross income	$ 261,175.75	$ 249,072.34	$ 258,891.11	$ 231,374.44	$ 184,186.09	$ 252,003.14
Income deductions:						
Interest on funded debt	$ 185,901.33	$ 186,189.32	$ 192,941.75	$ 199,376.63	$ 201,839.53	$ 194,575.18
Amortization of debt discount and expense	25,644.20	25,590.10	26,941.26	30,317.56	31,087.63	24,542.07
Taxes assumed on bond interest					824.25	2,020.40
Other interest charges	1,887.62	1,914.26	2,177.31	1,875.15	2,147.49	1,850.69
Interest charged to construction (*credit*)	*(1,757.27)*	*(1,757.27)*		*(108.31)*	*(248.23)*	*(632.68)*
Miscellaneous income deductions						3,000.00
Total income deductions	$ 211,675.88	$ 211,936.41	$ 222,060.32	$ 231,461.03	$ 235,650.67	$ 225,355.66
Net income or *(loss)*	$ 49,499.87	$ 37,135.98	$ 36,830.79	$(86.59)	$(51,464.58)	$ 26,647.48

NOTES:

The income accounts for the calendar years 1928 to 1939, inclusive, shown above, differ from those previously reported by the Company for those years, due to reallocations between periods of certain items of expense and income, adjustments not heretofore reflected, and to changes in the classifications of the Uniform System of Accounts prescribed by the Illinois Commerce Commission which became effective January 1, 1938 and differed from the classification used in prior years.

The Company has purchased under a contract dated February 17, 1927, the entire gas output of North Shore Coke & Chemical Company (an affiliated company) since the date of commencement of operations by that Company (June 1, 1928). The original contract covering the price of gas purchased was amended on December 12, 1936, and again on June 1, 1938, the effect thereof in each instance being a reduction in the price payable for gas. In addition to the price changes occasioned by

AS COMPANY

OME ACCOUNT

d for the Twelve-Months Period Ended May 31, 1941

1935	1934	1933	1932	1931	1930	1929	1928
$1,359,721.67	$1,351,871.46	$1,434,720.27	$1,607,235.38	$1,726,997.91	$1,829,269.98	$1,751,181.51	$1,672,005.89
$1,024,365.24	$1,090,225.63	$1,039,188.48	$1,089,557.79	$1,134,943.69	$1,289,755.74	$1,254,630.63	$1,109,918.49
109,771.11	109,468.05	109,295.85	109,418.89	107,939.33	103,224.55	102,994.23	107,802.76
6,901.76		12,946.99	33,019.86	35,123.82	34,465.84	26,989.72	37,047.59
$1,141,038.11	$1,199,693.68	$1,161,431.32	$1,231,996.54	$1,278,006.84	$1,427,446.13	$1,384,614.58	$1,254,768.84
$ 218,683.56	$ 152,177.78	$ 273,280.95	$ 375,238.84	$ 448,991.07	$ 401,823.85	$ 366,566.93	$ 417,237.05
27,996.08	$ 32,455.85	$ 38,639.77	$ 39,121.76	$ 20,290.73	$ 9,561.32	$ 7,852.80	
26.02	212.49	1,282.71	4,006.49	8,404.48	4,430.67	4,568.25	$ 5,867.51
1,968.55	1,644.29	1,347.74	1,643.52	2,654.59	5,253.54	5,603.75	5,236.03
$ 29,989.60	$ 34,312.68	$ 41,270.22	$ 44,771.77	$ 31,349.80	$ 19,245.53	$ 18,024.80	$ 11,103.54
$ 248,673.16	$ 186,490.41	$ 314,551.17	$ 420,010.61	$ 480,340.87	$ 421,069.38	$ 384,591.73	$ 428,340.59
198,700.08	$ 199,141.39	$ 200,000.00	$ 200,000.00	$ 194,984.12	$ 150,000.00	$ 148,861.14	$ 127,900.08
24,542.08	24,542.08	24,542.08	24,542.08	23,811.73	15,777.88	14,969.80	13,352.20
2,077.29	1,974.25	2,062.00	2,110.26	3,376.55	926.17	594.54	1,388.43
2,582.15	2,555.61	2,619.94	2,992.61	3,075.94	3,271.04	4,371.67	7,145.21
(110.39)	*(48.31)*	*(199.73)*	*(141.89)*	*(1,854.08)*	*(3,137.96)*	*(2,581.58)*	*(3,220.97)*
3,177.40		687.50	1,375.00				
230,938.54	$ 228,173.02	$ 229,711.79	$ 230,878.05	$ 223,344.26	$ 166,837.13	$ 161,215.57	$ 146,564.87
$ 17,734.62	*$(41,682.61)*	$ 84,839.38	$ 189,132.56	$ 256,996.61	$ 254,232.25	$ 223,376.16	$ 281,775.72

the above mentioned amendatory agreements, the price of gas purchased during the period from January 1, 1931, to March 1, 932, was fixed by an informal arrangement which resulted in an increase in the average price paid for gas during this period. From February 1, 1936 until January 1, 1937 a special discount was allowed to the Company as a deduction from the price computed under the terms of the original contract. This special discount was incorporated in the amendatory agreement of December 12, 1936, mentioned hereinabove.

e provisions for 1940 and 1941 federal income taxes cover normal taxes and surtax only, the provision for 1941 being based on the Revenue Act of 1941. The Company paid no excess profits taxes for 1940 and expects to pay none for the year 1941.

ASSETS AND DEFERRED CHARGES

FIXED CAPITAL (See note 1):			
Property, plant and equipment		$3,892,127.11	
Organization expense		3,488.85	
			$3,895,615.96
INVESTMENTS:			
Securities of and advances to subsidiaries not consolidated—			
North Continent Mines, Inc.:			
Capital stock of $1 par value—100,000 shares, being 100% of capital stock outstanding, at cost	$ 44,754.29		
Advances and accrued interest thereon	231,498.16		
	$276,252.45		
Less: Reserve for losses since date of acquisition	49,188.95		
		$ 227,063.50	
The S. W. Shattuck Chemical Company:			
Capital stock of $100 par value—300 shares, being 60% of capital stock outstanding, at cost	$ 28,992.51		
Advances and accrued interest thereon	111,739.40		
		140,731.91	
		$ 367,795.41	
Miscellaneous investments, at cost		700.00	
			368,495.41
CURRENT ASSETS:			
Cash in banks and on hand		$ 590,950.30	
Accounts receivable—			
North Shore Gas Company (an affiliate)	$ 54,364.99		
Other, less reserve of $725.34	107,582.34		
		161,947.33	
Inventories (See note 2)		121,613.30	
			874,510.93
DEFERRED CHARGES:			
Unexpired insurance		$ 2,661.59	
Unamortized debt discount and expense		22,387.89	
Deferred expense re proposed Plan of Reorganization		21,046.03	
Cash in closed banks, less reserve of $4,064.58		155.03	
			46,250.54
DISCOUNT ON PREFERRED STOCK (See note 3)			330,000.00
			$5,514,872.84

NOTE: Dividends in arrears on the 7% cumulative preferred stoc

NOTES:

(1) The company's property, plant and equipment assets are subject to the lien (mortgage) of the Trust Indenture dated as of January 1, 1937 under which the Joint First Mortgage Bonds, Series "A", 4%, due January 1, 1942, of North Shore Gas Company and North Shore Coke & Chemical Company were issued. Under the provisions of an agreement between the companies (made for their own convenience and protection and having no effect on the rights of the bondholders) North Shore Gas Company assumed the obligation to pay such Joint Bonds and North Shore Coke & Chemical Company sold to North Shore Gas Company $1,700,000 of Five Year 4% Debentures, due January 1, 1942. Such debentures have the same relative provisions as the Joint Bonds. Of the $5,100,000 in principal amount of Joint Bonds originally issued, $305,000 have been redeemed through the debt service fund leaving $4,795,000 outstanding at May 31, 1941, of which $191,000 were owned and held in treasury by North Shore Gas Company at that date.

The carrying value of property, plant and equipment, as shown by the balance sheet at May 31, 1941, contains the following elements:

Plant site and preliminary services carried at valuation placed thereon by Board of Directors in the year 1927. The company paid $1,000 cash and issued $250,000 par value 7% cumulative preferred stock and $199,000 par value common stock to William A. Baehr for the land and preliminary services. The Board of Directors, at a meeting held February 21, 1927, declared the property and services so received to be of a value in excess of $750,000 thereby constituting payment in full for the stock issued and also constituting an additional payment of $300,000, which it directed to appear on the books of the corporation as paid-in surplus. Mr. Baehr sold the preferred stock and a portion of the common stock which he received in this transaction and made a contribution to the company of the proceeds from such sale ($250,000) less the cost of the plant site to him of $147,840. This contribution, in the amount of $102,160 was not applied as a reduction of the property values but was credited to donated surplus where it appears in the balance sheet at May 31, 1941, as part of the donated surplus of $436,706.78	$ 750,000.00
Other property, plant and equipment carried at cost, such cost including engineering, supervision, interest (including dividends on preferred stock as well as interest on bonds), amortization of debt discount and expense, taxes and insurance during construction. Included herein are charges by the William A. Baehr Organization (a proprietorship) and the William A. Baehr Organization, Inc. (an affiliated company and successor to the business of William A. Baehr Organization) for engineering services and supervision during construction of the company's coke plant, such charges being sufficient to allow those organizations substantial profits on their services. Major portions of the profits so derived were contributed back to the company. These contributions, in total amount of $334,546.78, were not applied as reductions of the property values but were credited to donated surplus where they appear in the balance sheet at May 31, 1941, as part of the donated surplus of $436,706.78	3,142,127.11
	$3,892,127.11

MAY 31, 1941

LIABILITIES, CAPITAL SHARES AND SURPLUS

CAPITAL SHARES:			
Preferred 7% cumulative stock, $100 par value (entitled to $100 per share and accrued dividends on liquidation; redeemable at $110 per share and accrued dividends)—			
Authorized and issued 15,000 shares		$1,500,000.00	
Common stock, $1 par value—			
Authorized and issued—200,000 shares	$200,000.00		
Less: Reacquired and held in treasury—650 shares	650.00	199,350.00	
			$1,699,350.00
FUNDED DEBT:			
Five year 4% debentures, due January 1, 1942 (See note 1)—			
Authorized and issued		$1,700,000.00	
Less: Redeemed through debt service fund		102,300.00	
			1,597,700.00
CURRENT LIABILITIES:			
Accounts payable—			
Trade	$ 33,145.29		
William A. Baehr Organization, Inc. (an affiliate)	1,148.79	$ 34,294.08	
Accrued salaries and wages		10,427.22	
Accrued general taxes		25,876.81	
Accrued federal income taxes including provision of $30,531.13 for 1941 taxes based on Revenue Act of 1941		53,710.45	
Accrued interest on five year 4% debentures, due to North Shore Gas Company (an affiliate)		26,628.30	
			150,936.86
RETIREMENT RESERVE			694,192.82
SURPLUS:			
Earned surplus		$ 635,986.38	
Paid-in surplus		300,000.00	
Donated surplus		436,706.78	
			1,372,693.16
			$5,514,872.84

-y 31, 1941 amounted to ($11.41⅝ per share) $171,250.

Provisions to the retirement reserve are as determined by the management and are not purported to measure depreciation on the basis of the theoretical useful life of the various classes of property. These provisions were made at the rate of $80,000 per annum from commencement of operations to December 31, 1930 and at the rate of $48,000 per annum from January 1, 1931 to December 31, 1936. Commencing January 1, 1937, the annual provision was increased to $60,000, which latter amount is $20,000 less than the amount claimed annually as depreciation in the federal income tax returns of the company.

(2) The inventories of the company at May 31, 1941 are as follows:

Product inventories—		
Coke	$ 473.68	
Breeze	5,403.85	
Tar	2,568.75	
Ammonium sulphate	1,098.72	
Sulphur paste	2,798.21	
		$ 12,343.16
Manufacturing and other materials and supplies—		
Coal for carbonization	$102,036.17	
Miscellaneous manufacturing and other materials and supplies	7,233.97	
		109,270.14
		$121,613.30

The inventories shown above are book inventories as no physical inventories were taken by company employes at May 31, 1941, it being the company's practice to verify quantities and make necessary adjustments to perpetual inventory records at the time when stocks are low or exhausted. During the year ended May 31, 1941, coal, sulphate and tar stocks were so adjusted. The coke stock has not been sufficiently low for accurate adjustment since 1937, but a conservative estimate of the overage in the coke inventory was made in 1939 and the records adjusted accordingly.

The coke inventory is valued at substantially less than existing selling prices after deducting selling expenses. Breeze is used by the company as a fuel, very little being sold, and is valued at prices which are less than the inventory value of coke. Tar and ammonium sulphate are valued at less than existing selling prices. Sulphur paste is valued at cost, which is substantially less than existing selling prices. This cost includes the raw cost of the sulphur as purchased from North Shore Gas Company and the actual processing cost incurred by North Shore Coke & Chemical Company in producing the finished paste. Coal for carbonization is valued at cost to the company, which cost includes expenses of unloading the coal. All other materials and supplies are valued at cost.

(3) Discount on preferred stock, in the amount of $330,000, arose through the exchange in 1927 of $1,250,000 par value 7% cumulative preferred stock of the company for $1,000,000 principal amount of the North Continent Utilities Corporation (parent company) 6½% convertible sinking fund gold debentures, Series "A", which debentures had a market value of $920,000 at the time and were disposed of by the company for that amount. No provision has been made for writing off this discount.

NORTH SHORE COKE

CONDENSED IN

For the Period from June 1, 1928 (date of comm
For the Calendar Years 1929 to 1940, Both
Ended May

	Twelve Months Ended May 31, 1941	1940	1939	1938	1937	1936
Gross sales of gas and coke, less discounts, returns and allowances	$1,384,977.05	$1,257,645.23	$1,067,936.02	$1,207,679.42	$1,487,613.65	$1,345,766.83
Operating expenses, including cost of sales, maintenance and taxes (other than federal income taxes):						
Cost of sales	$ 908,135.98	$ 833,994.38	$ 681,458.91	$ 745,482.28	$ 826,586.51	$ 818,344.89
Other operating expenses	176,329.11	162,854.32	147,642.89	171,341.68	182,003.09	181,421.60
Provision for depreciation	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00	48,000.00
Provision for Federal income taxes	47,201.16	30,905.76	18,810.97	25,740.79	31,254.70	35,282.49
	$1,191,666.25	$1,087,754.46	$ 907,912.77	$1,002,564.75	$1,099,844.30	$1,083,048.98
Operating income	$ 193,310.80	$ 169,890.77	$ 160,023.25	$ 205,114.67	$ 387,769.35	$ 262,717.85
Other income:						
Interest on advances to subsidiaries not consolidated, taken up to the extent earned by the subsidiaries	$ 6,504.92	$ 6,923.95	$ 18,265.06	$ 9,772.40	$ 3,925.85	$ 698.83
Interest on Joint First Mortgage Bonds, Series "A", 4%, paid by North Shore Gas Company (affiliate)			880.00	880.00	893.22	
Interest received and accrued on advances to North Continent Utilities Corporation (parent)						
Miscellaneous interest income				13.90	12.20	.98
Rentals and profit on purification charges, etc., charged to North Shore Gas Company (affiliate)	2,304.88	2,418.67	2,089.53	5,524.47	9,338.90	8,930.97
Miscellaneous	4,474.65	4,869.34	4,021.04	3,593.40	5,163.18	3,569.55
	$ 13,284.45	$ 14,211.96	$ 25,255.68	$ 19,784.17	$ 19,333.35	$ 13,200.28
Gross income	$ 206,596.25	$ 184,102.73	$ 185,278.93	$ 224,898.84	$ 407,102.70	$ 275,918.13
Income deductions:						
Interest on funded debt	$ 64,275.00	$ 64,730.00	$ 65,786.00	$ 66,794.00	$ 70,746.68	$ 88,813.54
Interest on unsecured bank loans		423.62	3,125.00	4,927.94	6,760.42	
Other interest charges	104.07	104.07	242.62	268.66	247.87	1[illegible]
Amortization of debt discount and expense	39,417.66	39,690.96	39,507.12	40,112.52	40,692.60	7,705.64
Taxes assumed on bond interest						2,033.89
Provision for losses (profits) of subsidiaries not consolidated	13,518.57	(4,762.78)	(9,686.37)	554.48	3,876.22	(2,293.74
Miscellaneous charges				592.54	1,208.09	1,700.0[illegible]
Extraordinary expense due to damage caused by lake storm						
	$ 117,315.30	$ 100,185.87	$ 98,974.37	$ 113,250.09	$ 123,531.88	$ 97,971.12
Net income	$ 89,279.96	$ 83,916.86	$ 86,304.51	$ 111,648.75	$ 283,570.82	$ 177,947.01

NOTES:

The income accounts for the period from June 1 to December 31, 1928 and for the calendar years 1929 to 1939, inclusive, shown above differ from those previously reported by the Company for those years due to reallocations between periods of certai items of expense and income and adjustments not heretofore reflected.

The company has sold its entire output of gas since date of commencement of operations to North Shore Gas Company (an affiliated company) under a contract dated February 17, 1927. The original contract covering the price to be received for ga sold was amended December 12, 1936, and again on June 1, 1938, the effect thereof in each instance being a reduction in th price receivable for gas. In addition to the price changes occasioned by the above mentioned amendatory agreements, tl

CHEMICAL COMPANY

ME ACCOUNT

ment of operations) to December 31, 1928; ded, and for the Twelve-Months Period 941

Calendar Years							Period from June 1, 1928 to Dec. 31, 1928
1935	1934	1933	1932	1931	1930	1929	
1,131,118.28	$1,131,170.30	$1,120,397.45	$ 892,177.98	$ 765,837.79	$1,136,626.44	$1,252,164.06	$ 557,140.95
745,957.41	$ 702,548.62	$ 723,629.87	$ 582,453.33	$ 392,088.09	$ 577,519.07	$ 632,183.74	$ 270,221.62
171,857.07	151,037.01	146,084.62	140,724.09	102,135.84	120,559.93	108,185.64	49,263.19
48,000.00	48,000.00	48,000.00	48,000.00	48,000.00	79,999.92	79,999.92	46,662.00
5,281.91	19,356.31			9,764.56	27,593.29	34,126.07	16,212.77
971,096.39	$ 920,941.94	$ 917,714.49	$ 771,177.42	$ 551,988.49	$ 805,672.21	$ 854,495.37	$ 382,359.58
160,021.89	$ 210,228.36	$ 202,682.96	$ 121,000.56	$ 213,849.30	$ 330,954.23	$ 397,668.69	$ 174,781.37
698.82	$ 749.82						
2,136.28	5,555.61	$ 1,746.88					
28.83	10.70	592.37	$ 737.48	$ 627.25	$ 1,641.13	$ 2,469.12	$ 1,736.85
8,491.84	9,134.17	9,903.81	9,048.94	7,067.38	10,563.62	10,328.11	5,468.55
4,104.47	3,264.89	3,390.76	6,538.84	5,042.54	5,736.30	6,481.27	2,553.43
15,460.24	$ 18,715.19	$ 15,632.82	$ 16,320.26	$ 12,727.17	$ 17,941.05	$ 19,278.50	$ 9,746.88
175,482.13	$ 228,943.55	$ 218,315.78	$ 137,320.82	$ 226,576.47	$ 348,895.28	$ 416,947.19	$ 184,527.20
94,896.17	$ 99,821.42	$ 104,663.79	$ 110,517.58	$ 113,871.03	$ 118,910.32	$ 119,945.67	$ 70,000.00
660.00	540.00		1,882.00	1,148.90	739.73	156.60	534.72
8,147.70	8,557.34	8,946.82	9,291.66	14,798.34	11,411.80	10,020.00	5,846.00
1,596.01	2,089.23	2,170.28	2,587.14	2,496.17	1,268.97	3,361.06	981.39
12,077.47							
						10,146.78	
117,377.35	$ 111,007.99	$ [illegible]	$ 124,168.38	$ 132,304.44	$ 132,325.90	$ 143,630.11	$ 77,361.11
58,104.78	$ 117,936.56	$ [illegible]	$ 13,152.44	$ 94,272.03	$ 216,669.38	$ 273,317.08	$ 107,166.09

ice of gas sold during the period from January 1, 1931, to March 1, 1932, was fixed by an informal arrangement which resulted an increase in the average price received for gas during this period. From February 1, 1936, until January 1, 1937, a special scount was granted by the Company as a deduction from the price computed under the terms of the original contract. This ecial discount was incorporated in the amendatory agreement of December 12, 1936, mentioned hereinabove.

provisions for 1940 and 1941 federal income taxes cover normal taxes and surtax only, the provision for 1941 being based on e Revenue Act of 1941. The Company paid no excess profits taxes for 1940 and expects to pay none for the year 1941.

PRO FORMA BALANC…

(This balance sheet has been prepared to refl… th… appeared had the provisions of Sections 8 and 9 of th… that date and is after giving effect to certain reduction… other adjustments as described in Note 2 hereto).

ASSETS AND DEFERRED CHARGES

UTILITY PLANT (See Note 2 below relating, among other things, to reduction in carrying value):			
Franchises, organization expense, etc.		$ 140,520.50	
Gas plant		9,374,121.31	$ 9,514,641.81
INVESTMENTS:			
Other security investments, at cost			1,060.00
CURRENT ASSETS:			
Cash in banks and on hand		$ 395,791.75	
Accounts and notes receivable—			
Gas consumers	$148,161.31		
Merchandise and jobbing customers	159,050.91		
Other	108,643.78		
	$415,856.00		
Less: Reserve	24,296.28	391,559.72	
Inventories—			
Operating and construction material and supplies	$191,413.32		
Merchandise for resale	62,193.35		
Coke and other by-products	12,343.16	265,949.83	1,053,301.30
OTHER ASSETS:			
Appliances installed in customers' premises under rental purchase contracts		$ 32,173.42	
Special deposits		1,840.86	
Notes receivable—not current		520.00	34,534.28
DEFERRED CHARGES:			
Unexpired insurance and other prepaid items		$ 7,269.10	
Unamortized debt discount and expense		30,000.00	
Cash in closed banks and restricted funds	$ 10,070.69		
Less: Reserve	9,915.66	155.03	
Leasehold improvements in process of amortization over terms of lease		7,458.04	
Other deferred charges		10,938.71	55,820.88
			$10,659,358.27

NOTES:

(1) The notes applying to the balance sheets of the Company and North Shore Coke & Chemical Company submitted herein in Exhibits A & C are also applicable to this balance sheet.

(2) This balance sheet is after giving effect to the provisions of Sections 8 and 9 of the annexed Plan which relate to (1) the proposed recapitalization of the Company, (2) the acquisition by it of the properties (except as set forth in Section 6(e) of the Plan) of North Shore Coke & Chemical Company and the assumption of liabilities of that company and (3) the issuance and sale of new securities and the application of the proceeds therefrom, together with other funds of the Company, to the retirement of the Joint First Mortgage Bonds (North Shore Gas Company and North Shore Coke & Chemical Company —joint issuers) 4%, due January 1, 1942. In giving effect to the issue and sale of the new securities it has been assumed that they will consist of $3,700,000 in principal amount of First Mortgage Twenty Year 4% Bonds and $700,000 in principal amount of 3½% Serial Notes (maturing serially $50,000 semi-annually) to be sold at par; the total estimated proceeds of $4,400,000 therefrom plus $310,733.34 from the cash on hand at May 31, 1941 being applied herein to reflect the payment of (1) the outstanding [illegible],000.00 in principal amount of Joint First Mortgage Bonds, (2) accrued interest thereon to May 31, 1941 of $76,733.34 and (3) estimated financing expenses of $30,000. There has also been reflected herein the elimination or write-off of the unamortized debt discount and expense at May 31, 1941 relating to the Joint First Mortgage Bonds. No provision has been made for federal income taxes, if any, which may arise as a result of the reorganization under the Plan.

This balance sheet also reflects reductions in the carrying values of the items comprising the "Utility Plant" accounts as shown on the books of the Company and North Shore Coke & Chemical Company at May 31, 1941 and other adjustments as follows:

Reduction in "Utility Plant" account items—

The Company:

Elimination or write-off of utility plant adjustment accounts (being the excess of the book value of utility plant over the original

AS COMPANY

EET—MAY 31, 1941

ncial position at May 31, 1941 as it would have
ed Plan of Reorganization been consummated at
he carrying values of the Utility Plant Assets and

LIABILITIES, CAPITAL SHARES AND SURPLUS

CAPITAL SHARES:			
Common shares, $15.00 par value			
Authorized—150,000 shares			
Issued—134,355 shares (See Section 8 of the Annexed Plan)			$ 2,015,325.00
FUNDED DEBT (See Section 9 of the annexed Plan and Note 2 below):			
First Mortgage Twenty Year 4% Bonds		$3,700,000.00	
3½% Serial Notes (maturing serially $50,000 semi-annually)	$700,000.00		
Less:			
Amount due in one year included in current liabilities below	100,000.00		
		600,000.00	
			4,300,000.00
CURRENT LIABILITIES:			
3½% Serial Notes—Installments due within one year		$ 100,000.00	
Accounts payable		58,723.54	
Consumers' meter deposits		30,467.35	
Accrued salaries and wages		26,675.06	
Accrued general taxes		104,173.00	
Accrued federal income taxes, including provision of $47,990.76 for 1941 taxes based on Revenue Act of 1941		80,084.38	
Accrued interest		17,353.17	
Due to affiliated companies		3,427.80	
Reserve for estimated expenses of Plan of Reorganization	$175,000.00		
Less: Amounts expended in connection therewith	37,639.32		
		137,360.68	
Miscellaneous current liabilities		683.50	558,848.48
DEFERRED CREDITS:			
Customers' advances for construction			8,213.70
RESERVES:			
Depreciation reserve		$2,053,434.98	
Maintenance reserve		7,002.34	
Miscellaneous		3,156.08	2,063,593.40
CONTRIBUTIONS IN AID OF CONSTRUCTION			90,580.06
CAPITAL SURPLUS			1,622,797.63
			$10,659,358.27

cost thereof at dates first devoted to utility service; see Note 1 to Company's balance sheet, Exhibit *A*)		$3,823,716.16
North Shore Coke & Chemical Company:		
Elimination of excess of value ($750,000) placed on coke plant site at formation of Company in 1927 over cost ($147,840.00) to affiliated vendor. (See Note 1 to balance sheet of North Shore Coke & Chemical Company, Exhibit *C*)	$602,160.00	
Elimination of portion of profit to William A. Baehr Organization included in charges for engineering services and supervision during the construction of the company's coke plant, being the excess of profits of $334,546.78 (contributed back to the Company) over the amount thereof ($100,000) retained in property account. (See Note 1 to balance sheet of North Shore Coke & Chemical Company, Exhibit *C*)	234,546.78	
		836,706.78
		$4,660,422.94
Other adjustments—		
Elimination or write-off of Deferred Engineering expenses (See Note 4 to Company's balance sheet, Exhibit *A*)	$ 26,006.21	
Reserve provided for estimated expenses to be incurred in connection with the Plan of Reorganization (any excess or deficiency in this reserve will be applied to Capital Surplus)	175,000.00	
		201,006.21
		$4,861,429.15

NORTH SHORE GAS COMPANY

CONDENSED PRO FORMA INCOME STATEMENT

For the Twelve-Months Period Ended May 31, 1941

(Being the combined income accounts of the Company and North Shore Coke & Chemical Company, the properties of which (except as set forth in Section 6(c) of Plan) are proposed to be acquired pursuant to the Plan, prepared on a consolidated basis after elimination of inter-company transactions and after giving effect to anticipated reductions in interest charges and other adjustments as explained in Notes 2, 3 and 4 below)

Operating revenues:			
Gas sales		$1,541,438.15	
Other gas revenue		28,085.12	$1,569,523.27
Operating revenue deductions:			
Operating expenses—			
Manufactured gas production:			
Operation	$1,088,234.58		
Maintenance	52,506.52		
Residuals credit	*(798,474.46)*	$ 342,266.64	
Other operating expenses:			
Operation	$ 394,512.01		
Maintenance	40,236.29		
Uncollectible accounts	5,316.66	440,064.96	
		$ 782,331.60	
Provision for depreciation		174,424.50	
Taxes (other than federal income taxes)		147,582.85	
Provision for federal income taxes:			
Normal income tax	$ 64,880.82		
Surtax	18,673.57	83,554.39	1,187,843.29
Operating income			$ 381,679.98
Other income			1,210.21
Gross income			$ 382,890.19
Income deductions:			
Interest on funded debt (See Note 4)		$ 171,625.00	
Amortization of debt expense (See Note 4)		2,491.15	
Other interest charges		1,991.69	176,107.84
Net income			$ 206,782.35

NOTES:

(1) The revenues and expenses shown above have been classified in accordance with the Uniform System of Accounts for Gas Companies prescribed by the Illinois Commerce Commission which system of accounts provides that sales of coke and other residual products be treated as a reduction of operating expenses. The residuals credit shown above consists of residual sales, principally of coke, aggregating $877,679.11; residuals used in production, $120,987.77; less residuals expense, principally selling and marketing of $108,372.65 and inventory variation of $96,819.77.

(2) The net income shown above is before the charges and credits made in the accounts of North Shore Coke & Chemical Company during the stated period in respect to the reserve for losses of subsidiaries not consolidated and credits for interest earned on advances thereto (See Exhibit *D*), such charges and credits being considered of a non-recurring nature because the investments therein are not proposed to be acquired by the North Shore Gas Company.

(3) The provisions for federal income taxes have been computed on the basis of the earnings shown herein at the rates set forth by the Revenue Act of 1941 applied as if the indicated earnings for the full twelve-months were subject to taxation under this Act.

(4) The interest on funded debt and amortization of debt expense shown above represent the estimated amounts of such charges to be absorbed in expenses during the first year in which the new securities proposed to be issued (See Note 2 to Exhibit *E*) are outstanding rather than the actual amounts of such interest and amortization charges absorbed during the twelve-months period ended May 31, 1941. No credit has been taken for interest during construction as the amount of interest capitalized in recent years has not been material.

Exhibit B

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C.

Exhibit L

In the Matter of

NORTH SHORE GAS COMPANY
NORTH SHORE COKE & CHEMICAL COMPANY
NORTH CONTINENT UTILITIES CORPORATION

File No. 54-32

(Public Utility Holding Company Act of 1935)

REPORT OF THE COMMISSION ON A PLAN OF REORGANIZATION

Explanation of Proceeding

This is a report of the Securities and Exchange Commission on a plan which provides for the recapitalization of North Shore Gas Company (hereinafter referred to as the "Gas Company"), the sale of the greater part of the assets of North Shore Coke & Chemical Company (hereinafter referred to as the "Chemical Company") to the Gas Company, the compromise of certain mismanagement claims asserted on behalf of the Gas Company, the refunding of certain bonds of the Gas Company and the Chemical Company by the Gas Company alone, and the subsequent dissolution of the Chemical Company. The Gas Company and the Chemical Company are subsidiaries of North Continent Utilities Corporation (hereinafter referred to as "North Continent").

The report has been prepared because the Public Utility Holding Company Act requires that such a report be furnished to assist stockholders in determining whether to vote for or against the plan. Stockholders are urged carefully to consider the report and the other material furnished them. Under the plan the holders of two-thirds of the outstanding Preferred Stock of the Gas Company, of a majority of the publicly owned Preferred Stock of the Chemical Company (exclusive of the stock owned by North Continent and the directors of the applicant companies) and of a majority of the outstanding Common Stock and Preferred Stock of the Chemical Company must approve the plan before it can be consummated. The assent of the Trustee under the Indenture securing North Continent's bonds is also necessary.

The Companies Involved

The Gas Company is an operating company, distributing manufactured gas. Among its outstanding securities is an issue of bonds upon which the Gas Company and Chemical Company are jointly and severally liable. For convenience we refer to these as the "Joint Bonds." As between the two companies, the Gas Company is liable for two-thirds of the issue, and the Chemical Company for one-third. Also outstanding are Preferred Stock and Common Stock of the Gas Company. The Preferred Stock, which has a par value of $100 per share, has a 7% cumulative preference as to dividends over the Common Stock, and dividend arrearages on this stock have accumulated for over seven years. The voluntary liquidating preference of the Preferred Stock is $100 per share plus arrearages of dividends. The latter amounted as of May 31, 1941 to $52.16⅔ per share. Each share of both the Preferred and Common Stock carries one vote.

The Chemical Company is primarily engaged in the production of coke oven gas, coke, and related by-products. It has outstanding, in addition to the Joint Bonds previously mentioned, Preferred and Common Stock. The Preferred Stock, which has a par value of $100 per share, has a 7% cumulative preference as to dividends over the Common Stock, and as of May 31, 1941 there were unpaid dividends on this stock of $11.41⅔ a share. The voluntary liquidation preference of the Preferred Stock is $100 per share plus arrearages of dividends. Each share of both the Preferred and Common Stock carries one vote.

North Continent is solely a holding company. Of the stock of the Gas Company it owns all of the Common and 637 shares of Preferred out of 27,956 Preferred shares outstanding. Of the stock of the Chemical Company it owns 198,150 shares of Common out of 199,350 shares outstanding and 13,721 shares of Preferred out of 15,000 shares outstanding. All the Common Stock of the Gas Company and 12,500 out of the 13,721 shares of Preferred Stock of the Chemical Company owned by North Continent are pledged as security for the latter's outstanding bonds.

Reasons for Effecting a Reorganization

It appears that the Joint Bonds, which mature January 1, 1942, cannot be refunded, except possibly at excessive cost, if the Gas Company and the Chemical Company continue as separate enterprises. The two companies are economically interdependent. The Gas Company relies upon the Chemical Company for approximately 85% of its gas supply and the Chemical Company has no customer for its gas other than the Gas Company. It is accordingly proposed that the greater part of the assets of the Chemical Company be sold to the Gas Company and it is expected that the enlarged Gas Company will be able to refund the bonds.

A committee representing preferred stockholders of the Gas Company, hereinafter referred to as the "Committee", has asserted certain mismanagement claims on behalf of the Gas Company against North Continent, William A. Baehr,[1] and the Chemical Company.[2] The plan includes a compromise of these claims.

The capital structure of the Gas Com[illegible] requirements of the Preferred Stock have been far in excess of the company's ability

[1]President and director of the Gas Company, Chemical Company, and North Continent and controlling stockholder of North Continent.

[2]And against officers and directors additional to Baehr and against William A. Baehr Organization, Inc., a service company subsidiary of North Continent.

to earn, and there are large dividend arrearages on this stock. Voting power is not equitably distributed among the stockholders, voting control being vested in the Common Stock which, from the standpoint of both assets and earnings, is utterly worthless. The plan is designed to eliminate these unsatisfactory conditions by providing for the cancellation of the Common Stock and the substitution of new Common for the Preferred.

Summary of Plan

The plan contemplates that the Gas Company will be recapitalized. Its stock will then consist only of Common Stock having a par value of $15 per share. In the recapitalization of the Gas Company, North Continent will receive nothing for its 100 percent interest in the Common Stock and nothing for its 637 shares of Preferred Stock, and the entire initial issue will go to the public holders of the Preferred Stock of the Gas Company. Immediately upon the recapitalization of the Gas Company, it will take over the principal assets of the Chemical Company and issue additional shares of Common Stock in payment for these assets. As part of the compromise of claims of the Gas Company against North Continent and Baehr, the public holders of the Gas Company's Preferred Stock will receive the new Common Stock in the Gas Company, which Baehr would otherwise be entitled to receive in respect of 247 out of 347 of his holdings of the Preferred Stock of the Gas Company and, also, part of the shares of Gas Company new Common Stock issued to the Chemical Company for its assets (representing the proportional interest in the Chemical Company attributable to so much of North Continent's holdings of the Chemical Company's Preferred Stock as are not pledged with the Trustee for the bondholders of North Continent). Baehr is also making a cash payment of $67,430.00 or, $2.50 per share, to the public holders of the Preferred Stock of the Gas Company. After giving effect to these transactions, the public holders will receive for each share of Gas Company Preferred Stock, about 3.027 shares of the new Common Stock, representing in the aggregate approximately 61 percent of the total stock. The balance of approximately 39 percent[3] will be held temporarily by the Chemical Company, but it is proposed to liquidate the Chemical Company in the event that it proves possible to refund the outstanding Joint Bonds. In the liquidation of the Chemical Company there will be distributed this new Common Stock of the Gas Company and certain miscellaneous assets of the Chemical Company which are not included in the sale to the Gas Company. The public holders of the Preferred Stock of the Chemical Company and the Trustee for the bondholders of North Continent, as pledgee of most of North Continent's holdings of Preferred Stock of the Chemical Company, will receive for each share of Chemical Company preferred stock 3.8 shares of stock of the Gas Company. The remaining assets of the Chemical Company will be distributed pro rata among

[3]The Chemical Company receives about 42.46% of the new Common Stock of the Gas Company in the first instance and the minority Preferred Stockholders of the Chemical Company share on that basis. However, about 3.46% of the new Common Stock (representing part of North Continent's interest in the Chemical Company) is to be distributed to the Preferred Stockholders of the Gas Company.

its Preferred Stockholders, including the unpledged holdings of North Continent, except that arrangements are made to provide a cash payment of $7.45 per share to the public holders of the Chemical Company's Preferred Stock in addition to their pro rata share in the stock of two subsidiaries of the Chemical Company. The plan provides for a cash payment of $5 per share to the small amount of Common Stock which is publicly held, amounting in the aggegate to $3,500. North Continent is taking over at its face value, in lieu of cash, a claim against one of the Chemical Company subsidiaries. North Continent receives nothing for its Common Stock in the Chemical Company.

The plan states that the aforesaid provisions reflect an overall settlement and compromise of the conflicting views of the applicant companies, the Committee, and the Trustee under the Indenture securing North Continent's bonds as to the mismanagement claims of the Gas Company, and as to the relative values of the Gas Company and the assets of the Chemical Company proposed to be sold; and that upon consummation of the plan, the said claims will be released and discharged.

As soon as possible after the recapitalization of the Gas Company and the sale of the Chemical Company assets as aforesaid, the Gas Company will refund the Joint Bonds by issuance of $3,700,000 principal amount of 20-Year First Mortgage Bonds and $700,000 principal amount of Serial Notes to mature $50,000 semi-annually.[4] The plan states that if it becomes impossible or inadvisable to refund the Joint Bonds, it is nevertheless intended to consummate the portion of the plan with respect to the recapitalization of the Gas Company, the sale of the Chemical Company assets, and the compromise of the claims.

The plan provides that the initial board of directors of the reorganized Gas Company shall consist of 9 directors, 5 of whom are to be approved by the Committee and 4 by North Continent. These directors will be chosen for a term of office to continue until the first annual meeting of stockholders to be held in April of 1943. The charter provides for cumulative voting for the election of directors. It should be noted, however, that North Continent, presently controlled by Baehr, will have about 35.38% of the new Common Stock of the Gas Company upon consummation of the reorganization. For all practical purposes, it would appear that this will be sufficient to insure control of the Gas Company in April, 1943, by North Continent and Baehr.

[4]The plan states that in view of possible changes in market conditions prior to the consummation of the plan, it may become advisable to change the terms or character of the securities to be issued to refund the Joint Bonds. Security ho[illegible] to the plan, consent to the issuance of such new bonds and notes, and to such provisions in the [illegible] agreement as the Board of Directors of the Gas Company (subject to the approval of the Committee and Trustee) shall deem advisable, subject only to the following limitations: (a) The principal amount of securities to be issued shall not exceed the principal amount of the Joint Bonds to be refunded, (b) the interest rate on the new bonds and the average interest rate on the new notes shall not exceed 4½% per annum, (c) the total discount, if any, on the new securities shall not exceed 5% of the total principal of said securities, and (d) the premium payable upon redemption of any such new securities shall not exceed 8% of the principal amount.

Fairness of the Plan

The allocations of the new Common Stock of the Gas Company made in the plan embody a compromise between the applicant companies, the Committee, and the Trustee under the Indenture securing North Continent's bonds. We are satisfied that the bargaining was at arm's-length. The parties, however, are not agreed on the question of just how the compromise was arrived at, and, indeed, it is impossible to say with complete precision of what it consists.

The claims are in the main based upon the following:

1. It is contended that in the formation of the Chemical Company in 1927 as a separate corporation North Continent and Baehr took advantage of a so-called corporate opportunity which rightly belonged to the Gas Company.

2. It is contended that the contract pursuant to which the Chemical Company has sold its gas to the Gas Company was unfair to the Gas Company, and was merely a device to siphon the earnings of the Gas Company for the benefit of North Continent, via its holdings of the Preferred Stock of the Chemical Company.

3. It is contended that the Gas Company was required to pay excessive service charges to Baehr and to a corporation controlled by him.

4. It is contended that in 1929 to 1931 the Gas Company was improperly required to pay dividends (out of earned surplus) and make loans to North Continent (since repaid with interest) and to perform other financial transactions to its damage.

These allegations, if established, might result in legal or equitable liabilities for money damages or in the subordination of securities owned by North Continent in the Gas Company and Chemical Company to the interest of the public Preferred Stockholders of the Gas Company.

Defenses are asserted to all of the claims, some by the management and others by the Trustee under the Indenture securing North Continent's bonds.

It should be noted that the fairness or unfairness of the Gas Supply Contract has bearing not only on the question of possible return of excessive profits, but also upon future earnings of the Gas Company and the Chemical Company, and therefore upon the present relative value of their properties.

It should also be borne in mind that the greater part of North Continent's assets are pledged to secure its outstanding bonds. These are currently selling at prices which seem to indicate that the equity, if any, which North Continent has in such pledged assets is not substantial. North Continent is giving up under the plan value estimated by the Committee to be equivalent to about half of its unpledged assets.

It has been estimated, and we think reasonably so, that the property which the Gas Company is to acquire from the Chemical Company will, from 1941 through 1943, account for about 57% of the total earnings of the enlarged Gas Company. As we have seen, in exchange for its properties the Chemical Company will receive about 42.46% of the new Common Stock, or about 14.5% less than the figure of 57%. This 14.5% can be regarded as representing the composite of (a) adjustment for additional factors bearing upon the relative value of assets and (b) what the Chemical Company is giving up by way of compromise of the claims against it. We roughly estimate that the amount of value that the Chemical Company is giving up by way of compromise is somewhere between $250,000 and $350,000.

What the Chemical Company is giving up by way of compromise inures to the benefit of the public Preferred Stockholders of the Gas Company. In addition they receive from North Continent and Baehr by way of compromise the following:

(a) 5,384 shares of the new Common Stock of the par value of $15 per share.

(b) $67,430 in cash.

(c) Benefit arising from North Continent's surrender for cancellation of 637 shares of the present Preferred Stock of the Gas Company. If a share of such Preferred Stock be considered as equivalent to 2.8 shares[5] of the new Common Stock, this benefit would be equivalent to 1783.6 shares of new Common Stock.[6]

The public Preferred Stockholders of the Gas Company are to receive in all for both their interest in the Gas Company, exclusive of the claims and by way of compromise of the claims, about 61% of the new Common Stock and $67,430 in cash. This is equivalent to about 3.027 shares of the new Common Stock and $2.50 in cash per share of publicly held Preferred Stock.

We have described these claims and the defenses to them in our findings and opinion approving the plan.[7] As we there point out, we believe that the compromise of these difficult and conflicting claims which is embodied in the plan falls within permissible limits and that the plan is fair and equitable.

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[5]This is the basis upon which new Common Stock is to be substituted for the publicly held Preferred Stock upon recapitalization of the Gas Company.

[6]It seems proper to regard all of the benefit arising from the cancellation as inuring to the public Preferred Stockholders of the Gas Company, for the allocations as between the Gas Company and the Chemical Company apparently were predicated upon the situation existing upon cancellation of North Continent's holdings in the Gas Company. The present Common Stock of the Gas Company is worthless and hence its cancellation cannot be regarded as a benefit to Preferred Stockholders for purposes of the point now under discussion.

[7]Copies of the findings and opinion, are obtainable upon request made to the Secretary of the Commission, 1778 Pennsylvania Ave., N. W., Washington, D. C.

Requirement of Holding Company Act

The present stock structure of the Gas Company is repugnant to the provisions of the Public Utility Holding Company Act. Unless voluntarily brought into compliance with the Act, it would be the duty of the Commission to require such action. In the opinion of the Commission the proposed plan would bring the stock structure of the Gas Company into conformity with the standards of the Act.

Accordingly, the Commission has entered an order which will permit consummation of the plan. However, whether to vote for or against the plan must and should be determined by each stockholder for himself in the exercise of his own judgment in the light of the information furnished him.

By the Commission.

Francis P. Brassor,
Secretary.

Exhibit F

AGREEMENT, made this 25th day of June, 1947, between NORTH SHORE GAS COMPANY, an Illinois corporation of 209 Madison Avenue, Waukegan, Illinois, hereinafter described as the seller, and WAUKEGAN COKE CORPORATION, a Delaware corporation, duly authorized to do business in the State of Illinois, of Waukegan Illinois, hereinafter described as the purchaser,

W I T N E S S E T H:

That the seller agrees to sell and convey, and the purchaser agrees to purchase, all that lot or parcel of land, with the buildings and improvements thereon, in the Township of Waukegan, County of Lake, and State of Illinois, described as follows:

> That part of the Northwest Quarter of Section 22, Township 45 North, Range 12 East, of the Third Principal Meridian in Lake County, Illinois, described as:
>
> Commencing at the Southwest Corner of the Northwest Quarter of Section 22, Township 45 North, Range 12 East, in Waukegan Township, Lake County; thence Northeasterly, making a Northeast angle of 89° 29' with the East and West center line of said Section 22 to a point on the North line of City Street, 66 feet from, measured at right angles, the East and West center line of said Section 22; Thence East with and along the North line of said City Street, parallel to the East and West center line of said Section 22, 585.37 feet to a point on the Northwesterly line of Harbor Street; Thence Northeasterly with and along said Northwesterly line of Harbor Street and making a Northeasterly angle of 75° 12' 10" with the last described course extended East 119.43 feet to a point; Thence East parallel to and 181.47 feet from, measured at right angles, the said center line of Section 22, 373.61 feet to a point; Thence Northeasterly making a Northeasterly angle of 60° 1' 15" with the last described course extended East 417.44 feet to the point of beginning; Thence East parallel to and 543.06 feet from, measured at right angles, the said center line of Section 22 and making a Southeasterly angle of 113° 58' 45" with the last described course,

1,389.49 feet, more or less, to a point on the shore line of Lake Michigan (this course to be known as the first course); Thence Northwesterly with and along said shore line to an intersection with a line running parallel with and 1420 feet North of, measured at right angles, the South line of the property hereby described, being the said first course (this course along said shore line to be known as the second course) said shore line being approximately as follows: running Northerly and making a Northwesterly angle of 38° 55' with said first course 179.16 feet to a point; Thence Northeasterly continuing along said shore line and making a Northeasterly angle of 4° 59' 15" with last described course extended Northerly 675.5 feet to a point; Thence continuing Northeasterly with and along said shore line and making a Northeasterly angle of 4° 52' 45" with last described course extended Northerly 573.67 feet to a point (end of description of shore line); Thence West 1250.39 feet to a point (this course to be known as the third course); the last described course also being parallel to and 1420 feet North of, measured at right angles, the South line of property herein described; Thence Southwesterly, making a Southeasterly angle of 100° 31' 36" with last described course (being the said third course) 1430.2 feet to a point (this course to be known as the fourth course); Thence continuing Southwesterly and making a Southwesterly angle of 19° 27' 9" with the last described course, extended Southerly (being fourth course), 16.03 feet to the point of beginning (this course to be known as the fifth course).

Together with all ovens, fixtures, apparatus, machinery, equipment and fittings installed in or located on said premises and used in connection therewith in the operation of said premises as a gas plant and/or coke plant, as well as docks, piers and abutments.

Together with all accretions thereto and the riparian rights appurtenant thereto, but subject to any right, title and interest of the Elgin, Joliet and Eastern Railroad in and to the steel rails, ties and switches and other materials of the railroad tract upon said premises.

The foregoing tract is to be conveyed subject to zoning and building ordinances, the existing channel across said premises, and to all the terms, conditions and covenants contained in the certain deed of Elgin, Joliet and Eastern Railway Company dated March 14, 1927 (recorded March 16, 1927, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 262 of Deeds, page 610, as Document No. 295,717), conveying said premises to William A. Baehr, the obligations whereof the North Shore Coke & Chemical Company (a Delaware corporation) assumed as grantee in the certain deed of said William A. Baehr and Mabel S. Baehr, his wife, dated March 14, 1927, (recorded March 16, 1927, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 262 of Deeds, page 608, as Document No. 295,716) as modified or discharged by (i) a certain deed from said corporation to the City of Waukegan, Illinois, dated October 27, 1927 (recorded April 22, 1929, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 335 of Deeds, page 582, as Document No. 335250) conveying a strip of land one hundred (100) feet in width across said property; (ii) a certain deed from the City of Waukegan, Illinois, to said corporation, dated July 30, 1935 (recorded July 31, 1935 in the office of the Recorder of Deeds of Lake County, Illinois, in Book 413 of Deeds, page 277 as Document No. 415306) reconveying the said strip of land one hundred (100) feet in width to the Coke Company, and (iii) a certain deed from said corporation to the City of Waukegan, Illinois, dated July 31, 1935 (recorded August 2, 1935, in the office of the Recorder of Deeds of Lake County, Illinois, in Book 413 of Deeds, page 288, as Document No. 415,382) conveying a perpetual easement to the City of Waukegan to maintain and use a roadway on and along a strip of land fifty (50) feet in width across the above described premises;

Together with all personal property used or useful located or used at the Coke plant.

Together with all supplies of breeze fuel, sulphuric acid, arsenate, oil, tar, ammonium sulphate, soda ash, repair parts, and other operating materials and supplies and coke on hand at 7:00 A.M., (Central Daylight Saving Time), of the day on which the deed and bill of sale are deposited in escrow as hereinafter provided, and for which purchaser shall, in addition to the purchase price mentioned below, reimburse seller for its cost. Seller shall not be obligated to pay purchaser for any coal of purchaser delivered to seller prior to the deposit in escrow of deed and bill of sale, but any coke manufactured from said coal and by-products thereof shall be the property of purchaser and shall be segregated from all other coke owned by seller. Purchaser shall reimburse seller for seller's costs of labor in the period commencing with the use of purchaser's coal and ending with the date of deposit in escrow of the deed and bill of sale. Any orders for operating materials and supplies made by seller for delivery at its Coke Oven Plant and delivered after the deposit in escrow of the deed and bill of sale shall be the obligations of purchaser, and purchaser agrees to hold harmless seller against any liability or costs with respect thereto.

The price is $650,000.00, payable as follows: Two Hundred Fifty Thousand Dollars ($250,000.00) in escrow, in cash, lawful money of the United States or a certified check on the signing of this contract, (the receipt whereof is hereby acknowledged) and the payment of the balance of Four Hundred Thousand Dollars ($400,000.00) in escrow, in cash, (plus the amount of reimbursement for cost of operating materials and supplies and labor as aforementioned) lawful money of the United States or by certified check on the delivery of the deed and bill of sale as hereinafter provided.

Upon the execution of this agreement by the parties hereto, there shall be placed in escrow with the Chicago Title and Trust Company, Chicago, Illinois, under an appropriate escrow agreement, the terms of which are to be agreed upon by the parties, the earnest money in the amount of Two Hundred Fifty Thousand Dollars ($250,000.00) heretofore mentioned, and the balance of the purchase price, by the purchaser, and a deed and bill of sale by the seller; said escrow to provide that upon the further deposit in said escrow of a certified copy of an order of the Illinois Commerce Commission authorizing the transaction herein provided for and a release of the Continental Illinois

National Bank and Trust Company of Chicago, Trustee, as hereinafter mentioned, and the grants of easement by purchaser to seller as hereinafter provided, the said escrow agent shall deliver the deposited funds and the release to the seller and the deed and bill of sale to the purchaser, said escrow agreement to contain such further terms and conditions as may be agreed upon by the seller and purchaser.

The following are to be apportioned as of the date of closing:

> Seller shall, prior to the date of deposit in escrow of the deed and bill of sale to purchaser, pay all real estate taxes assessed against the property with respect to the year 1946, and real estate taxes with respect to the year 1947 shall be apportioned between seller and purchaser so that seller shall pay to purchaser in respect of 1947 real estate taxes a pro rata amount thereof, based on 1946 taxes, from January 1, 1947, to the date of the deed and bill of sale.

This sale covers all right, title and interest of the seller to any land lying in the bed of any street, road or avenue open or proposed, in front of or adjoining said premises, to the center line thereof, including the perpetual right to the easement which provides for ingress and egress to the site, and all right, title and interest of the seller in any award for damage to said premises by reason of the change of location or grade or any street, avenue and easement. The seller will execute and deliver to the purchaser, on closing of title or thereafter upon demand, all proper instruments for the conveyance of such rights and title including the assignment and right of collection of any such award.

If, at the time of the delivery of the deed, the premises, or any part thereof, shall be affected by an assessment or assessments which are, or may become, payable in installments of which the first installment is then a charge or lien, or has been paid, then for the purpose of this contract, all the unpaid installments of any such assessments, including those which are to become due and payable after delivery of the deed, shall be deemed to be due and payable and to be liens upon the premises affected thereby, and shall be paid and discharged by the seller upon the delivery of the deed. Unconfirmed improvements or assessments, if any, shall be paid by the seller if the work has been completed prior to closing.

All notices of violation of law or municipal ordinances affecting the premises shall be complied with by the seller, and the premises shall be conveyed free of the same, and this provision of the contract shall survive delivery of the deed. The seller warrants that the buildings on the premises do not violate any restriction, regulation or ordinance. If the existing restrictions, regulations, or ordinances do not permit the use of said premises for a coke plant, then, at the option of the purchaser exercised within thirty days from date of delivery of deed to purchaser by escrow agent, this contract shall become null and void, and the seller shall refund to the purchaser all payments made hereunder, and reimburse the purchaser for the reasonable expenses of title examination, tax search and survey if incurred by purchaser.

Seller acknowledges that in purchasing the assets described herein, purchaser is not assuming any of seller's liabilities except as otherwise expressly provided for herein. Seller understands that purchaser is not taking over any of seller's employee organizations, employee contracts or employees as such although it is recognized that purchaser, its successors or assigns, in maintaining and/or beginning operation of a coke plant on the premises described herein may hire some or even all of the employees who are on seller's employment rolls at said premises at the time of consummation of this agreement. As to such employees seller acknowledges that purchaser is not liable for any Wage and Hour Claims, Unemployment Compensation Claims or any claims of any nature whatsoever arising out of or in any way connected with their employment by seller prior to the date of execution of this agreement. The provisions of this paragraph shall survive the delivery of the deed and bill of sale.

Seller agrees to indemnify and save harmless purchaser, its successors and assigns, from all loss, damage or expenses of any kind or nature arising out of or in any way connected with any claims whatsoever under the Illinois Workmen's Compensation Law and/or the Illinois Occupational Disease Act pending as of the date hereof. This provision shall survive the delivery of the deed and bill of sale.

This agreement constitutes the entire contract between the parties; it cannot be changed except by a written instrument, signed by the party consenting to such modification.

Subject to purchaser's right of determination whether existing restrictions, regulations or ordinances permit the use of said premises as a coke plant and purchaser's option to terminate as aforesaid, risk of loss or damage arising from the operation of said premises by purchaser on and after July 1, 1947 is assumed by purchaser. Risk of loss or damage to said premises from any other cause until delivery of deed and bill of sale is assumed by seller.

Purchaser agrees that concurrently with delivery of the deed and the bill of sale to purchaser, it will grant to seller a perpetual easement with respect to:

1. An existing 16-inch transmission line from the north line of the property, and an existing 4-inch transmission line connected thereto and extending to the south line of the Coke Plant property, and lying in that part of the premises over which there exists an easement for roadway purposes.

2. An existing 16-inch transmission line beginning at the south end of the above mentioned 16-inch line and running westerly to the meter house; also an existing 6-inch transmission line connected with the last mentioned 16-inch line and running southerly to the south line of the Coke Plant property, retaining the right to revoke the easements referred to in this paragraph upon ninety days prior written notice.

Said easements are to be more particularly described in the conveyances thereof to be deposited in the aforementioned escrow, and are to provide that seller shall have full responsibility with respect to the care, maintenance, operation and replacement thereof and purchaser shall have no liability whatever with respect thereto and shall be fully indemnified by seller with respect thereto.

Anything herein to the contrary notwithstanding the property to be conveyed to the purchaser shall not include the metering equipment located in the meter house, such equipment to be and remain the property of seller, and purchaser agrees that such equipment may remain upon purchaser's property acquired under the terms of this agreement without charge to seller and may be removed by seller provided however that seller agrees to remove said metering equipment from purchaser's property at any time upon sixty (60) days' prior written notice from purchaser requesting such removal, and provided further, while said equipment remains upon purchaser's property, purchaser shall have no liability whatsoever with respect thereto and be fully indemnified by seller with respect thereto.

All documents to be delivered and all notices to be given to the purchaser shall be in writing and given by personal delivery to Waukegan Coke Corporation, or shall be sent by registered mail addressed as follows: Waukegan Coke Corporation, Waukegan, Illinois.

Seller represents that the contract Herein has been reviewed by the Board of Directors of North Shore Gas Company and that the persons signing this contract on behalf of seller have been duly authorized by the Board of Directors of North Shore Gas Company and that seller will take all corporate action necessary for the purpose of making a complete and valid transfer of the real and personal property and all rights as herein provided, including proper action by its Board of Directors, and such necessary action by its stockholders and/or bondholders as may be required. If such action is not required by its stockholders, opinion of counsel to that effect should be furnished, including a proper affidavit by officers of seller, in such form as shall be approved by counsel of purchaser, to the effect that there are no liens against such property.

Anything herein to the contrary notwithstanding, the obligation of the seller to sell, obligation of the purchaser to purchase the property to be sold hereunder, shall be subject to the following conditions precedent:

(a) The Illinois Commerce Commission shall have issued an appropriate order consenting to and approving of this agreement and the sale and the conveyance herein provided for;

(b) Any other Federal, State, or local authority having jurisdiction in the premises shall have issued an appropriate order authorizing the sale and conveyance herein provided for; and

(c) Continental Illinois National Bank and Trust Company of Chicago, as Trustee under the Indenture of seller dated December 1, 1941, shall have executed and delivered an instrument of release such of the property to be sold hereunder as is subject to the lien of the said Indenture from the lien of said Indenture.

If the above mentioned orders and release shall not have been obtained within the period of twenty days from the date of execution of this agreement, then this agreement shall terminate, without any liability on the part of either of the parties hereto to the other party.

The deed shall be a full covenant and warranty deed, in proper form for recording, and shall be duly executed and acknowledged by the seller, at the seller's expense, and shall be in such form as is acceptable to counsel for purchaser. Any necessary revenue stamps shall be affixed to the deed and paid for by the seller.

The bill of sale, assignment or such other documents as are required for the proper transfer of title to all personal property referred to herein shall include an adequate description of all personal property and shall transfer and convey a good, indefeasible, marketable and unencumbered title thereto and be in a form satisfactory to counsel for purchaser.

The seller agrees that L. J. Sheridan & Company, of Chicago, Illinois, is the broker entitled to a commission by reason of this sale, and seller agrees to pay said broker all commissions to which he is entitled. Seller agrees that should any claim be made for broker's commission other than that payable to L. J. Sheridan & Company through or on account of any acts of seller or seller's representatives, seller will hold purchaser free and harmless of any and all liability. This provision shall survive the delivery of the deed.

IN WITNESS WHEREOF, the seller and purchaser have signed and sealed these presents the day and year first above written.

NORTH SHORE GAS COMPANY

CORPORATE SEAL

By /s/ A. W. Conover
President

Attest /s/ C. J. Mulholland
Secretary

WAUKEGAN COKE CORPORATION

CORPORATE SEAL

By /s/ Thomas C. Strachan, Jr.
President

Attest /s/ Walter I. Deffenbaugh
Secretary

STATE OF ILLINOIS)
) SS
COUNTY OF ~~XXXX~~ COOK)

On this 25th day of June, 1947, before me appeared A. W. Conover and C. J. Mulholland to me personally known, who, being by me severally duly sworn, did say that they were, respectively President and Secretary of the North Shore Gas Company, a corporation created and existing under the laws of the State of Illinois, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that the said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors; and the said President and Secretary acknowledged the said instrument to be the free act and deed of said North Shore Gas Company.

NOTARIAL SEAL

/s/ Nina E. Pringle

Notary Public, Cook ~~Lake~~ County,
Illinois

My commission expires:
October 21, 1950

STATE OF ILLINOIS)
) SS
COUNTY OF COOK ~~LAKE~~)

On this 25th day of June, 1947, before me appeared Thomas C. Strachan and Walter I. Deffenbaugh to me personally known, who, being by me severally duly sworn, did say that there were, respectively President and Secretary of the Waukegan Coke Corporation, a corporation created and existing under the laws of the State of Delaware, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that the said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors; and the said President and Secretary acknowledged the said instrument to be the free act and deed of said Waukegan Coke Corporation.

/s/ Marion I. Guyer

NOTARIAL SEAL

Notary Public, Cook ~~Lake~~ County,
Illinois

My commission expires:
February 6, 1950

RESOLUTION OF BOARD OF DIRECTORS
OF NORTH SHORE GAS COMPANY
RE SALE OF COKE OVEN PLANT

BE IT RESOLVED by the Board of Directors of North Shore Gas Company as follows:

1. That, in the judgment of the Board of Directors, it is in the best interests of the Company that the real estate and other property comprising its Coke Oven Plant located in Waukegan, Illinois (hereinafter called the "Coke Oven Plant") and being more particularly described in the agreement set forth in paragraph numbered 2 below, be sold; that the offer of Waukegan Coke Corporation, a Delaware corporation, to purchase the Coke Oven Plant for the price of $650,000 in cash, be, and the same is, hereby accepted; and that, in connection with said sale, taxes for the year 1947 be prorated and certain miscellaneous products produced at the Coke Oven Plant be sold at the cost thereof as provided in the agreement set forth in paragraph numbered 2 below.

2. That the President or the Vice President of the Company be, and he is, hereby authorized and directed to execute and deliver, and the Secretary or an Assistant Secretary of the Company be, and he is, hereby authorized to affix thereto the corporate seal of the Company and attest the same, in the name and behalf of the Company, an agreement for the sale of the Coke Oven Plant, in substantially the following form:

3. That the proper officers of the Company be, and they are, hereby authorized and directed to make, in the name and on behalf of the Company, application to the Illinois Commerce Commission, and to any other regulatory body that may have jurisdiction of the proposed transaction, and to executed, acknowledge and deliver, in the name and on behalf of the Company, all petitions and exhibits, and amendments thereto, and to attend such hearings and to do such other things, as may be necessary or desirable in connection with obtaining all necessary orders and authorizations of said Illinois Commerce Commission, and of any other regulatory body having jurisdiction of the proposed transaction, approving of and consenting to the sale by the Company of the Coke Oven Plant and to the entering into and carrying out of the aforesaid agreement.

4. That the proper officers of the Company be, and they are, hereby authorized and directed to execute, acknowledge and deliver in the name and on behalf of the Company, all deeds of conveyance, instruments of assignment, and bills of sale necessary to the consummation of said agreement and to execute, acknowledge and deliver, in the name and on behalf of the Company, such further agreements and instruments and to do such further things as may be necessary

or desirable to carry out and perform all obligations of the Company by it to be performed under said agreement.

I DO HEREBY CERTIFY that I am the duly elected, qualified and acting ____________ Secretary of NORTH SHORE GAS COMPANY; that the foregoing is a true and correct copy of a resulution adopted by the Board of Directors of said Company at a meeting duly held on June 25, 1947 at which meeting a quorum was present and voting throughout; and that said resolution is presently in full force and effect and has not been amended, modified or rescinded in any respect.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the corporate seal of North Shore Gas Company this 28th day of June, 1947.

C. J. Mulholland
____________ Secretary

(Corporate Seal)

-COPY-

June 30, 1947

Chicago Title & Trust Company
Chicago, Illinois

Attention: Mrs. B. A. Schrank

In re: Your Escrow Agreement No. 157493

Gentlemen:

With this letter we transmit the following on behalf of Waukegan Coke Corporation:-

1. Certified check No. 2 dated June 30, 1947, drawn upon Continental Illinois National Bank and Trust Company payable to your order in the amount of $400,000.00.

2. Indenture dated June 28, 1947, between Waukegan Coke Corporation, first party, and North Shore Gas Company, second party, granting unto the second party an easement in said indenture described and therein referred to as "Permanent easement."

3. Indenture dated June 28, 1947, between Waukegan Coke Corporation, first party, and North Shore Gas Company, second party, granting unto the second party an easement in said indenture described and therein referred to as "temporary easement."

The proceeds of the certified check are in payment of the balance of the purchase price and will be applied by you in accordance with the terms of the escrow agreement.

The indenture described in numbered paragraph 2 hereof is a grant of perpetual easement described in numbered paragraph 1 on page 8 of the copy of agreement attached to the escrow agreement.

The indenture described in numbered paragraph 3 hereof is the grant of easement referred to in paragraph no. 2 on page 8 of the agreement attached to the escrow. Notwithstanding the provisions of the escrow agreement, this indenture is not to be recorded by you.

The North Shore Gas Company is countersigning this letter by its President to indicate its concurrence in the modification of your instructions with respect to the recording of the indenture described in paragraph no. 3.

WAUKEGAN COKE CORPORATION

By /s/ Thomas C. Strachan, Jr.
Its President

NORTH SHORE GAS COMPANY

By /s/ A. W. Conover
Its President

TCSJr:pv
Enclosures

-COPY-

PAM, HURD & REICHMANN
231 S. La Salle Street
CHICAGO, ILLINOIS

July 14, 1947

Chicago Title and Trust Company
69 West Washington Street
Chicago, Illinois

Attention: Mrs. E. A. Schrank
Re: Escrow Agreement
Escrow No. 157495

Gentlemen:

We hand you herewith, as Escrowee under the above Escrow Agreement entered into between Waukegan Coke Corporation and North Shore Gas Company on June 26, 1947, the following on behalf of North Shore Gas Company:

1. Bill of sale from North Shore Gas Company to Waukegan Coke Corporation, dated July 9, 1947.

2. Release Deed dated July 14, 1947 from Continental Illinois National Bank and Trust Company of Chicago to North Shore Gas Company.

Please acknowledge receipt of the above mentioned documents.

Very truly yours,

PAM, HURD & REICHMANN

By

CHU:mj
encls.

July 14, 1947

Chicago Title and Trust Company
69 West Washington Street
Chicago, Illinois

Attention: Mrs. B. A. Schrank
Re: Escrow Agreement
Escrow No. 157493

Gentlemen:

Your attention is directed to the Agreement dated June 26, 1947 between Waukegan Coke Corporation and North Shore Gas Company, a counter-part of which has been deposited with you under the terms of the above mentioned Escrow.

The paragraph numbered fifth recites, in part, in the first sentence thereof that Illinois Title Company is prepared to issue their Owner's Title Insurance Policy to first party. We have been advised that as of June 26, 1947 that was not the fact, and that more accurately the reference should have been to the second party. This is to advise you that you shall incur no liabilities to either of the parties to the said Agreement by reason of the said inaccuracy.

The subparagraph (a) of the paragraph numbered fifth of the Agreement authorizes you to record certain documents set forth in the paragraph numbered fourth thereof. This is to advise you that you are not to record the documents numbered 1, 2 and 5 described in the aforementioned paragraph numbered fourth hereof.

Very truly yours,

WAUKEGAN COKE CORPORATION

By Lawrence E. Donohue
Its duly authorized attorney

NORTH SHORE GAS COMPANY

By Carl H. Urist
Its duly authorized attorney

PAM, HURD & REICHMANN
231 S. La Salle Street
CHICAGO, ILLINOIS

July 1, 1947

Chicago Title and Trust Company
69 West Washington Street
Chicago, Illinois

Attention: Mrs. B. A. Schrank
Re: Escrow Agreement, your #157493

Gentlemen:

We hand you herewith, as Escrowee under the above escrow agreement entered into between Waukegan Coke Corporation and North Shore Gas Company on June 26, 1947, the following on behalf of North Shore Gas Company:

1. Warranty deed from North Shore Gas Company to Waukegan Coke Corporation dated June 28, 1947.

2. Certified copy of order of Illinois Commerce Commission entered on June 26, 1947 in the matter of the application of North Shore Gas Company (Docket No. 35298).

3. Certified check of Pam, Hurd & Reichmann payable to your order in the amount of $364.65.

The warranty deed described in paragraph numbered 1 hereof is the deed referred to in Article Fourth (Item 4 thereof) of the escrow agreement.

The certified copy of the order of the Illinois Commerce Commission is the order referred to in Article Fourth (Item 1 thereof) of the escrow agreement.

At such time as you are prepared to record the deed referred to in paragraph numbered 1 hereof in accordance with the terms of the escrow agreement, you are hereby authorized and instructed to purchase documentary stamps in the amount of $364.65 from the proceeds of the check of Pam, Hurd & Reichmann transmitted herewith and to affix said stamps to the warranty deed referred to in paragraph numbered 1 hereof and to thereupon duly cancel said stamps.

Very truly yours,

PAM, HURD & REICHMANN

By

GBP:ep
enclosures

Exhibit G

THIS INDENTURE Made this 18th day of June, in the year of our Lord one thousand nine hundred and forty-seven (A. D. 1947) between WAUKEGAN COKE CORPORATION, a Delaware corporation, duly authorized to do business in the State of Illinois, First Party, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration to it paid by the NORTH SHORE GAS COMPANY, an Illinois corporation of 209 Madison Street, Waukegan, Illinois, Second Party, the receipt whereof is hereby acknowledged, does hereby grant unto the Second Party, its successors and assigns, a perpetual easement over the following described premises for the purpose of maintaining gas transmission lines, said premises being described as follows:

> A strip of land ten (10) feet in width lying five (5) feet on each side of the following described center line: Commencing at a point which is 2485 feet East of and 543.06 feet North of the Southwest corner of the North West Quarter of Section 22, Township 45 North Range 12, East of the 3rd Principal Meridian; running thence North Easterly to a point 21.4 feet East and 408.3 feet North of the place of beginning; thence Northeasterly to a point 59.4 feet East and 891.3 feet North of the place of beginning; thence Northeasterly to a point 1420 feet North and 137.4 feet East of the place of beginning, said line being designated as "permanent easement" on the plat hereto attached;

upon the following terms and conditions:

1. It is understood and agreed that the title to the transmission lines in the premises described shall at all times remain in the North Shore Gas Company, its successers and assigns, together with the right at any time to replace or remove all or any part thereof.

2. All work in connection with the maintaining, renewing and repairing of said transmission mains and all other equipment therewith, including replacements caused by the

utilization of First Party's property, shall be performed by and all cost and expense to be incurred shall be borne by and paid by North Shore Gas Company, its successors and assigns. All work done shall be in accordance with accepted practices for such services and shall meet local conditions applicable to design and construction.

3. Second Party, its successors and assigns, shall at all times indemnify and hold harmless First Party, its successors and assigns, against any costs, expenses, suits, loss, damage, injury or liability of any kind whatsoever arising out of the construction, maintenance and use of the right herein granted.

4. It is understood that the easement herein granted is subject to the terms and conditions of roadway easements heretofore granted over the same premises.

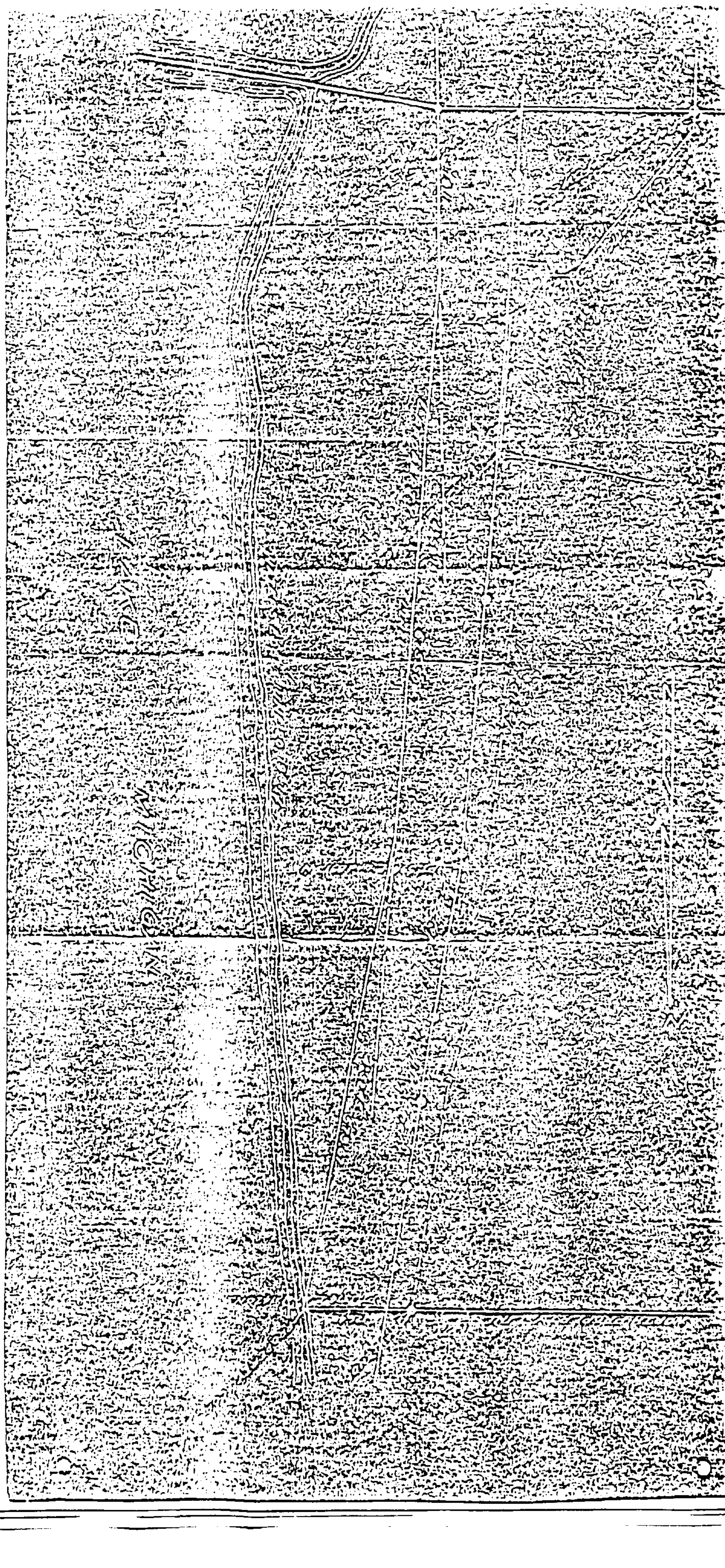
IN WITNESS WHEREOF the parties hereto have caused these presents to be signed in their respective corporate names by their properly authorized officers and caused their corporate seals to be hereto affixed the day and year first above written.

ATTEST:
~~Assistant~~ Secretary

WAUKEGAN COKE CORPORATION
BY ~~Vice~~-President.

ATTEST:
Secretary

NORTH SHORE GAS COMPANY
BY President.



STATE OF ILLINOIS)
COUNTY OF ~~LAKE~~ Cook) SS.

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that THOMAS C. STRACHAN, JR., personally known to me to be the ~~Vice~~-President of Waukegan Coke Corporation, a Delaware corporation, and WALTER L. DEFFENBAUGH, personally known to me to be the ~~Assistant~~ Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such Vice-President and Assistant Secretary, they signed and delivered the said instrument as Vice-President and Assistant Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority, given by the Board of Directors of said corporation as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 30th day of June, A. D. 1947.

Doris B. Wayland
Notary Public.

My Commission Expires Nov. 7, 1948

STATE OF ILLINOIS)
COUNTY OF LAKE) SS

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that R.W. CONOVER, personally known to me to be the President of North Shore Gas Company, an Illinois corporation, and C.T. MULHOLLAND, personally known to me to be the Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such President and Secretary, they signed and delivered the said instrument as President and Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority, given by the Board of Directors of said corporation, as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 28TH day of June, A. D. 1947.

HARRY F. LUTHER
NOTARY PUBLIC
LAKE COUNTY, ILL.

Harry F. Luther
Notary Public.

State of Illinois } ss. No. 621388
Lake County } JUL 14
Filed for record A. D.
1947 at 3:10 o'clock P M. and
duly recorded in Book 821
of RECORDS Page 593
Howard T. Scott
Recorder

AGREEMENT FOR PERMANENT
EASEMENT

WAUKEGAN COKE CORPORATION

with

NORTH SHORE GAS COMPANY

E. J. Mulholland
209 Madison
Waukegan Ill.

THIS INDENTURE Made this 28th day of June, in the year of our Lord one thousand nine hundred and forty-seven (A. D. 1947) between WAUKEGAN COKE CORPORATION, a Delaware corporation, duly authorized to do business in the State of Illinois, First Party, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration to it paid by the NORTH SHORE GAS COMPANY, an Illinois corporation, of 209 Madison Street, Waukegan, Illinois, Second Party, the receipt whereof is hereby acknowledged, does hereby grant unto the Second Party, its successors and assigns, an easement over the following described premises for the purpose of maintaining existing gas transmission lines, said premises being described as follows:

> A strip of land ten (10) feet in width lying five (5) feet each side of the following described line: Commencing at a point which is 2282.75 feet East of and 543.06 feet North of the South West corner of the North West quarter of Section 22, Township 45 North, Range 12, East of the 3rd Principal Meridian, and running North 18.4 feet to a point; thence Northeasterly 221 feet to a point 135.45 feet East and 192.9 feet North of the place of beginning; thence Easterly 34 feet to a point 169.45 feet East and 190.9 feet North of the place of beginning; thence Northeasterly to a point 187.25 feet East and 222.4 feet North of the place of beginning; thence Northeasterly to a point 215.75 feet East and 236.0 feet North of the place of beginning, said line being designated as "temporary easement" on the plat hereto attached;

upon the following terms and conditions:

1. The right hereby granted may be terminated upon ninety (90) days' prior written notice given by the First Party to North Shore Gas Company, its successors and assigns.

2. It is understood and agreed that the title to the transmission lines in the premises described shall at all times remain in the North Shore Gas Company, its successors and assigns, together with the right at any time to replace or remove all or any part thereof. In the event this grant is terminated the

North Shore Gas Company, its successors and assigns, shall, if so requested by First Party, or at its own option, remove all of its property and restore said premises to substantially the same condition as they previously were. In the event Second Party fails to remove its property as herein provided and restore the premises, First Party may, at its option, do so and charge the cost thereof to the Second Party, which cost the Second Party hereby assumes and agrees to pay.

3. All work in connection with the maintaining, renewing and repairing of said transmission mains and all other equipment therewith, including replacements caused by the utilization of First Party's property shall be performed by and all cost and expense to be incurred shall be borne by and paid by North Shore Gas Company, its successors and assigns. All work done shall be in accordance with accepted practices for such services and shall meet local conditions applicable to design and construction.

4. Second party, its successors and assigns, shall at all times indemnify and hold harmless First Party, its successors and assigns, against any costs, expenses, suits, loss, damage, injury or liability of any kind whatsoever arising out of the construction, maintenance and use of the right herein granted.

IN WITNESS WHEREOF the parties hereto have caused these presents to be signed in their respective corporate names by their properly authorized officers and caused their corporate seals to be hereto affixed the day and year first above written.

ATTEST:	WAUKEGAN COKE CORPORATION
Walter L. Dehulray	BY Thomas C. Strachan Jr
~~Assistant~~ Secretary	~~Vice~~-President
ATTEST:	NORTH SHORE GAS COMPANY
Q. Mulholland	BY [illegible]
Secretary	President.

STATE OF ILLINOIS)
COOK) SS.
COUNTY OF ~~XXXX~~)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that THOMAS C. STRACHAN, JR., personally known to me to be the ~~Xxxxx~~President of Waukegan Coke Corporation, a Delaware corporation, and WALTER I. DEFFENBAUGH, personally known to me to be the ~~Assistant~~ Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such Vice-President and Assistant Secretary, they signed and delivered the said instrument as Vice-President and Assistant Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority, given by the Board of Directors of said corporation as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 30th day of June, A. D. 1947.

Doris B. Wayland
Notary Public.

My Commission Expires Nov. 7, 1948

STATE OF ILLINOIS)
) SS.
COUNTY OF LAKE)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that A.W. CONOVER, personally known to me to be the President of North Shore Gas Company, an Illinois corporation, and C. J. MULHOLLAND, personally known to me to be the Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such President and Secretary, they signed and delivered the said instrument as President and Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority, given by the Board of Directors of said corporation as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 28TH day of June, A. D. 1947.

Harry F. Luther
Notary Public.

AGREEMENT FOR TEMPORARY EASEMENT

WAUKEGAN COKE CORPORATION

with

NORTH SHORE GAS COMPANY

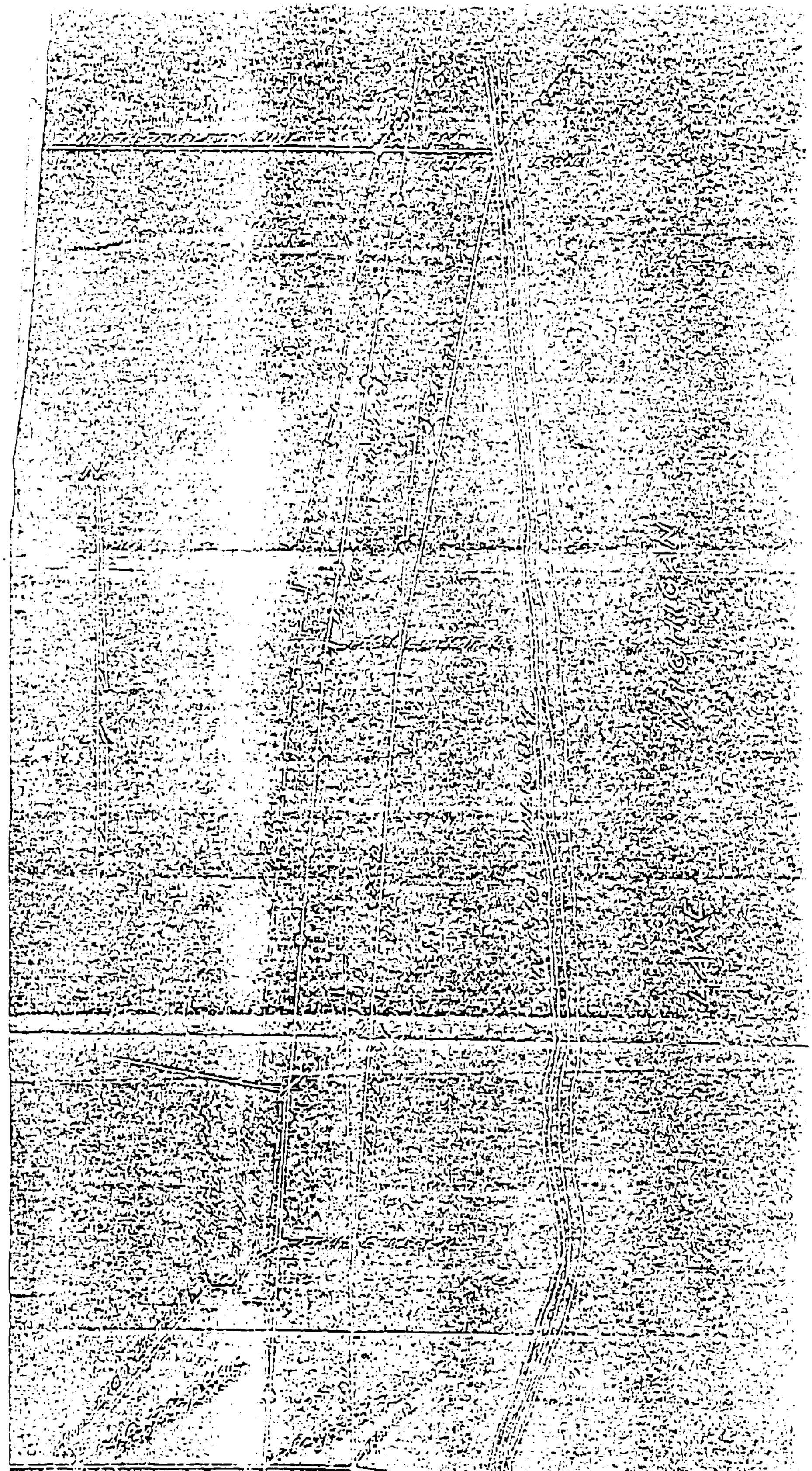


Exhibit H

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

In the Matter of the Application of NORTH SHORE GAS COMPANY for an order authorizing changes in the type and heating value of gas distributed in various cities and villages in Cook and Lake Counties, Illinois, the approval of Revised Rate Schedules, and authorizing the abandonment of coke plant operation and recovery of the undepreciated cost of this plant on a plan of amortization against future earnings.	NO. [illegible]

TO THE ILLINOIS COMMERCE COMMISSION:

NORTH SHORE GAS COMPANY, petitioner herein, respectfully represents as follows:

1. Petitioner is an Illinois corporation with its principal place of business in the City of Waukegan, Illinois, engaged among other things in the manufacture, distribution and sale of gas in various municipalities and communities in Cook and Lake Counties in the State of Illinois, and is a public utility within the meaning of the Illinois Public Utilities Act.

2. Petitioner is now furnishing manufactured gas having an average heating value of approximately 565 British Thermal Units per cubic foot in and about the cities and villages of Bannockburn, Deerfield, Glencoe, Grays Lake, Gurnee, Highland Park, Highwood, Lake Bluff, Lake Forest, Libertyville, Mundelein, North Chicago, Russell, Thornbury, Waukegan, Winnetka, Winthrop Harbor and Zion, located in the counties of Cook and Lake, Illinois.

3. Petitioner proposes to discontinue manufactured gas service in the cities and villages above mentioned and to substitute in lieu thereof the furnishing of straight natural gas service having a heating value of approximately 1,000 British Thermal Units per cubic foot.

The straight natural gas to be distributed will be purchased by petitioner from the Natural Gas Pipeline Company of America, an application for the approval of such distribution and purchase having been made to the said company on November 1, 1945.

4. Petitioner proposes to make effective in such cities and villages rate schedules for straight natural gas service which will effect material reductions in the cost of gas service to customers located therein as compared with the present rate schedule covering manufactured gas service; the proposed rate schedule will be filed with this Commission pursuant to the terms of the order of the Commission in this case.

5. Petitioner proposes to make, at its own expense, such adjustments as may be necessary in customers' gas burning appliances in such cities and villages to enable such appliance to utilize natural gas having a thermal content of approximately 1,000 British Thermal units per cubic foot.

6. In connection with the change from manufactured to natural gas, it will be unnecessary for petitioner to continue operations at its Coke Oven Plant and it is proposed to close this plant, and subject to the authorization of the Commission, to recover the undepreciated cost of the plant on a plan of amortization against earnings over a reasonable period of years.

7. The proposed change in gas service will permit certain operating economies to be effected by petitioner and will increase

the capacities of petitioner's gas distribution system and the proposed rate schedules will effect savings to customers, all of which will be in the public interest.

8. Petitioner has, concurrently with the transmittal to the Commission of this petition for filing, mailed a copy of this petition including the plan referred to therein, by United States registered mail to each of the cities and villages herein above named, together with a notice of the filing of the same, and petitioner prays that the Commission give to all such parties such notice as is required by law.

WHEREFORE, petitioner prays that this Commission enter an order herein authorizing petitioner to change the type and heating value of gas distributed in the above named cities and villages from manufactured gas having an average heating value of approximately 568 British Thermal Units per cubic foot to natural gas having an average heating value of 1,000 British Thermal Units per cubic foot, and to file and make effective, as natural gas service becomes available, rates for natural gas service in the form of proposed rates which will be submitted to the Commission at the hearing on this petition, and authorize petitioner to close its Coke Oven Plant property and recover the undepreciated cost on a plan of amortization against earnings over a reasonable period of years, and to make such other and further provisions and orders concerning the proposed change over from manufactured to natural gas as may appear appropriate or necessary.

Dated at Waukegan, Illinois, this 7th day of November, A. D. 1948.

NORTH SHORE GAS COMPANY

BY A. W. Conover (Signed)

President

HALL AND HULSE
Attorneys for Petitioner

STATE OF ILLINOIS)
) SS.
COUNTY OF LAKE)

A. W. CONOVER, being first duly sworn, on oath states that he is President of the North Shore Gas Company, a corporation; that he has read the foregoing petition by him subscribed and states the the contents thereof are true in substance and in fact.

A. W. CONOVER (Signed)

SUBSCRIBED AND SWORN TO
before me this 7th day
of November, A. D. 1948.

ALICE ELLSTROM (signed)
Notary Public.

(SEAL)

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION.

In the Matter of the Application of NORTH SHORE GAS COMPANY for an order authorizing changes in the type and heating value of gas distributed in various cities and villages in Cook and Lake Counties, Illinois, the approval of Revised Rate Schedules, and authorizing the abandonment of coke plant operation and recovery of the undepreciated cost of this plant on a plan of amortization against future earnings.	)	DOCKET NO. 33864

AMENDMENT TO PETITION

TO THE ILLINOIS COMMERCE COMMISSION:

NORTH SHORE GAS COMPANY, an Illinois corporation, petitioner herein, by leave heretofore granted by said Commission, does hereby amend its petition heretofore filed herein by adding as paragraphs 9, 10 and 11 to said petition, the following:

9. Petitioner also represents that it will be necessary for petitioner to enlarge its present distribution system and to construct, operate and maintain a twelve-inch gas distribution main from a point just Southeast of the Town of Grays Lake, to run in a general easterly direction through the petitioner's service territory connecting with existing gas mains running North and South; and it is proposed, subject to the authorization of the Commission, to construct such distribution main along the route generally described as follows:

> Commencing on the south side of the unimproved road known as Peterson Road at approximately the north west corner of the south west quarter of Section 7, Township 44 North, Range 11, East of the Third Principal Meridian, County of Lake, State of Illinois,

and extending eastwardly approximately 3,160 feet on said Petersen Road right-of-way through the above-mentioned Section 7, Township 44 North, Range 11, East of the Third Principal Meridian, to the intersection of Petersen Road with Milwaukee Road (State Route 21,) thence continuing eastwardly approximately 8,700 feet along south side of said Milwaukee Road right-of-way to the intersection of Milwaukee Road with State Route 63 and Buckley Road (State Route 20), thence eastwardly approximately 19,475 feet on the South side of Buckley Road right-of-way to the intersection of Buckley Road with Telegraph Road (State Route 42-A,) thence approximately 8,275 feet on the South side of Buckley Road right-of-way to the intersection of Buckley Road and Green Bay and Downey Roads, said intersection known as Five Points, and thence eastwardly approximately 5,000 feet on Downey Road to Sheridan Road (State Route 42) in the North West Quarter of Section 9, Township 44 North, Range 12, East of the Third Principal Meridian:

as shown on the plat heretofore offered in evidence as Petitioner's Exhibit 9.

10. Petitioner proposes an alternate route to conform with above route only to the point mentioned on Buckley Road at the intersection of Telegraph Road (State Route 42-A,) North East Quarter of Section 12, Township 44 North, Range 11, East of the Third Principal Meridian, from which point the alternate plan is to extend southwardly approximately 12,700 feet on Telegraph Road to the intersection of Buckland Road in the North West Quarter of Section 19, Township 44 North, Range 12, East of the Third Principal Meridian, and to extend north from above-mentioned point at Buckley Road and Telegraph Road one mile plus or minus on Telegraph Road and thence eastwardly through part of Section 1, Township 44 North, Range 11, East of the Third Principal Meridian, through Sections 6, 5 and 4, Township 44 North, Range 12, East of the Third Principal Meridian, into the City of North Chicago.

11. Petitioner has, concurrently with the transmittal of this petition to the Commission for filing, mailed a copy of this petition by United States registered mail to each of the cities and villages named in the application, together with a notice of the filing of the same.

Petitioner also amends the prayer for relief contained in the petition heretofore filed by adding thereto the following:

Petitioner also prays that this commission enter an order and issue to petitioner a certificate of convenience and necessity to construct, operate and maintain a twelve-inch gas distribution main for the enlargement of its distribution system along the route hereinabove in this petition more fully described.

Dated at Waukegan, Illinois, this 3rd day of December, A. D. 1945.

NORTH SHORE GAS COMPANY

BY ______________________________

President

STATE OF ILLINOIS)
) SS.
COUNTY OF LAKE)

A. W. CONOVER, being first duly sworn, on oath states that he is president of North Shore Gas Company, a corporation; that he has read the foregoing amendment to petition by him subscribed, and states that the same is true in substance and in fact.

____

SUBSCRIBED AND SWORN TO

before me this 3rd day

of December, A. D. 1945.

____
Notary Public.

HALL AND HULSE
Attorneys for Petitioner
5 North Genesee Street
Waukegan, Illinois
Telephone - Majestic 5300.

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

In the Matter of the Application of NORTH SHORE GAS COMPANY for Consent to and Approval of an Agreement for the Sale by North Shore Gas Company of its Coke Oven Plant located in the City of Waukegan, Illinois, and for the Consent to and Approval of the Sale and Conveyance provided for by the said Agreement.	)	No. 35298

PETITION OF NORTH SHORE GAS COMPANY

To the ILLINOIS COMMERCE COMMISSION:

NORTH SHORE GAS COMPANY, petitioner herein (hereinafter called the "petitioner"), respectfully shows and represents to this Commission as follows:

1. That petitioner is a corporation duly organized and existing under and by virtue of the laws of the State of Illinois; is a public utility within the meaning of Section 10 of Article I of an Act entitled "An Act Concerning Public Utilities", as amended, now in force in the State of Illinois; has its principal place of business in the City of Waukegan, Illinois; is engaged, among other things in the manufacture, (subject to the statements made below), distribution and sale of gas in various municipalities and communities in Cook and Lake Counties in the State of Illinois; and is authorized by its Articles of Incorporation, as amended, to own, operate and dispose of the property hereinafter mentioned.

2. That by order of this Commission, entered on the 8th day of January, 1946, in Docket No. 33264 petitioner was authorized, inter alia, to change the type and heating value of the gas furnished by it, by the furnishing of natural gas having a heating value of approximately 1,000 British Thermal Units per cubic foot in lieu of manufactured gas having an average heating value of approximately 565 British Thermal Units per cubic foot.

Since that date, January 8, 1946, the necessary installations for the rendering of natural gas service by petitioner have been completed; and necessary adjustments in customers' gas burning appliances to enable the use of natural gas in such appliances are being made throughout the territory served by petitioner, at petitioner's cost and expense. It is estimated that the task of making such adjustments will be substantially completed, and the change-over completed, on or about July 15, 1947.

Petitioner is now serving natural gas to about one-half its customers; it is anticipated that the use of gas manufactured at the Coke Oven Plant located at Waukegan, Illinois (hereinafter called the "Coke Oven Plant") will be discontinued no later than the date of consummation of the sale.

3. That, in the above mentioned order of the Commission, entered on the 8th day of January, 1946, the Commission found, inter alia, as follows:

"(7) that the coke oven plant of the petitioner located in Waukegan is not suitable for use as a stand-by reserve and that the petitioner should be authorized to discontinue the operation of the said plant at the time of the change-over from manufactured to natural gas, and with respect to the amortization of the said plant the Commission will issue its further and supplemental order prescribing the manner and details of the said amortization; ***."

In the above mentioned order of the Commission, entered on the 8th day of January, 1946, the Commission also ordered, inter alia, as follows:

"IT IS FURTHER ORDERED that the North Shore Gas Company be, and it is hereby, authorized, upon the substitution of natural gas for manufactured gas as aforesaid, to discontinue the operation of its coke oven plant and to amortize the said plant, but the manner and details of the said plan of amortization will be covered in a subsequent order of this Commission and jurisdiction retained for that purpose."

4. That petitioner desires to sell and convey to Waukegan Coke Corporation, a Delaware corporation, and Waukegan Coke Corporation (hereinafter called the "Buyer") desires to purchase and acquire from petitioner, the property constituting and comprising the Coke Oven Plant of petitioner located in Waukegan, Illinois, including real estate, together with the buildings, structures, erections and constructions thereon, and certain personal property, including machinery, tools and equipment, and operating materials and supplies, all as more fully set forth in the agreement entered into between petitioner and the Buyer, dated June 25, 1947 (hereinafter called

the "Agreement"), a true and correct copy of which is hereto attached, marked Exhibit A and made a part hereof.

The sale and conveyance provided for in the Agreement are made subject to certain conditions precedent, including, among other things, the entering of an appropriate order of consent and approval of the Agreement and of the sale and conveyance provided for therein, by this Commission, and the obtaining of a release from the Trustee under the Indenture pursuant to which certain bonds of petitioner are outstanding (as more fully set forth below in paragraph numbered 8 hereof).

Petitioner is informed that the Buyer is a Delaware corporation and proposes to use the property to be acquired by it from petitioner for the purpose of manufacturing coke for industrial purposes, and that the Buyer is not a public utility within the meaning of Section 10 of Article I of an Act entitled "An Act Concerning Public Utilities" as amended and now in force in the State of Illinois. Petitioner and the Buyer are not "affiliated interests" within the meaning of Section 8a of the said Act.

6. That the purchase price provided for in the Agreement is the sum of Six Hundred Fifty Thousand Dollars ($650,000). The Agreement also provides for the proration of taxes for the year 1947 and for the sale by the Company of miscellaneous products produced at the Coke Oven Plant at the cost thereof.

7. That the purchase price was determined by arm's length bargaining and negotiation by officers of petitioner and representatives of Buyer, and the said purchase price was accepted and approved by the Board of Directors of petitioner at a duly held meeting called for that purpose. The said price represents the fair value of the Coke Oven Plant on the date of the filing of this petition.

8. That the Coke Oven Plant is subject to the lien of the Indenture dated December 1, 1941 of petitioner to Continental Illinois National Bank and Trust Company of Chicago, as Trustee; and, as above stated, the proposed sale and conveyance of the Coke Oven Plant under the terms of the Agreement are subject to the condition precedent that petitioner shall have obtained a release of the Coke Oven Plant from the lien of said Indenture pursuant to the provisions of the said Indenture. Petitioner proposes in connection with securing said release, to deposit the proceeds of said sale in the amount of $650,000 with the said Trustee, pursuant to and in accordance with the terms and provisions of the said Indenture.

9. That petitioner cannot at this time present to the Commission a plan of amortization of the Coke Oven Plant, and therefore petitioner requests that the Commission retain jurisdiction with respect to the manner and details of the plan of amortization thereof.

10. That the sale and conveyance by petitioner of the Coke Oven Plant as herein described will not interfere

in any way with the furnishing of natural gas service to the public in the territory in which petitioner operates, and such sale and conveyance will be in the best interests of petitioner and will be in the public interest; and that this petition should reasonably be granted, and the public will be convenienced thereby.

WHEREFORE, petitioner respectfully prays that this Commission enter an order (a) consenting to and approving of the Agreement for the sale and conveyance by petitioner of its Coke Oven Plant located in Waukegan, Illinois, and consenting to and approving of the sale and conveyance therein provided for, as herein described to Waukegan Coke Corporation for a purchase price of Six Hundred Fifty Thousand Dollars ($650,000), under the terms and conditions herein set forth; and (b) granting such further relief as the Commission shall deem fit or necessary.

Chicago
Dated at Waukegan, Illinois, this 25 day of June, A.D. 1947.

NORTH SHORE GAS COMPANY

CORPORATE SEAL

By /s/ A. W. Conover
President

ATTEST:

/s/ C. J. Mulholland
Secretary

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

A. W. Conover and C.J.Mulholland, being first duly sworn, on oath depose and state that they are the President and Secretary, respectively, of NORTH SHORE GAS COMPANY, a corporation; and each of them respectively states that he has read the foregoing petition by him subscribed on behalf of North Shore Gas Company, and that the contents thereof are true in substance and in fact.

/s/ A. W. Conover
President

/s/ C. J. Mulholland
Secretary

NOTARIAL SEAL

SUBSCRIBED and sworn to before me, this 25th day of June, A.D. 1947.

/s/ Loretta A. Diebold
Notary Public

My commission expires: February 3, 1949

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Exhibit I

In the matter of the application of North Shore Gas Company for an order authorizing changes in the type and heating value of gas distributed in various cities and villages in Cook and Lake counties, Illinois, the approval of revised rate schedules, and authorizing the abandonment of coke plant operation and recovery of the undepreciated cost of this plant on a plan of amortization against future earnings.	:	33264

O R D E R

By the Commission:

On November 2, 1945, the North Shore Gas Company filed its petition in the above entitled matter. On December 1, 1945, an amendment to the said petition was filed. Pursuant to due notice as required by law and by the rules and regulations of the Commission hearings were held at the offices of the Commission in Chicago on November 28, 1945, and on December 7, 1945. At the said hearings petitioner was represented by counsel and appearances were also entered on behalf of the cities and villages of North Chicago, Lake Bluff, Lake Forest, Winnetka and Glencoe. The Zion Industries, Inc., was granted leave to intervene in the said proceedings and appeared at the said hearings.

The application as amended seeks authorization of this Commission to change the type and heating value of the gas distributed by petitioner in certain cities and villages served by it, the approval of revised and reduced rate schedules, the authorization of abandonment of the operation of petitioner's coke oven plant, and amortization of the said plant, and for a certificate of convenience and necessity to construct, operate and maintain a certain twelve-inch gas distribution main for the enlargement of petitioner's gas distribution system.

The proposal of the petitioner in brief is to change over its entire system from service by manufactured gas to service by natural gas. The manufactured gas now supplied to consumers is obtained mainly from a coke oven gas plant located in Waukegan. This plant, as shown by the evidence, has become inadequate to supply the needs of the public in the territory. The coal used to produce this gas is West Virginia coal and the cost of that coal has increased from $3.48 per ton (into the ovens) in 1933 to $6.09 per ton in 1945. The petitioner has been unable to attach new and additional customers since 1942 and in the year 1942 had a serious interruption of supply. An adequate supply of natural gas will become available to the petitioner if certain authorities are granted in a proceeding now pending before the Federal Power Commission, and the proposal of the petitioner in the case now before the Illinois Commerce Commission is contingent upon the outcome of said proceedings before the Federal Power Commission. The petitioner proposes, in the event that the change-over to natural gas is made, to file new rate schedules which will represent a substantial saving to customers as compared with the present rates for service by manufactured gas, and also proposes to bear the expense of adjusting customers' appliances to permit the use of natural gas.

The Commission has received communications from the following cities and villages, some in the form of resolutions and others in more informal manner, but all approving the proposed change-over and suggesting favorable and speedy action by the Commission; Deerfield, Grays Lake, Highland Park, Lake Bluff, Lake Forest, Libertyville, Mundelein, Waukegan, Winnetka, Winthrop Harbor and Zion. No representations have been made to the Commission in opposition to the said plan either by municipalities or any other parties. The city of Lake Forest presented a witness whose testimony supports the proposal of the petitioner.

There appears to be urgency with respect to the change-over to natural gas, primarily in order that adequate gas service be rendered to the public in this territory but also in order that the public receive the benefit of the lower rates. In view of this fact the Commission will enter its order at the present time with respect to the matter of change-over, rates, and certificate of convenience and necessity, and will also authorize the amortization of the Waukegan coke oven plant but will reserve jurisdiction for the purpose of directing further details with respect to the said amortization. In this connection it may be pointed out that the Waukegan coke oven plant is unsuitable for use as a stand-by reserve for the reason that a coke oven plant cannot be put into service quickly but requires a long period of warming up and, when out of service for a considerable length of time, may require considerable replacement of refractory brick or other material before the plant can again be placed in operation. This explanation is made for the reason that some suggestions have been made in connection with this proceeding that the said plant be retained for stand-by purposes.

The Commission having considered the aforesaid petition as amended and all of the evidence, both oral and documentary, the statements of counsel and others who have entered appearance, and being fully advised in the premises, is of the opinion and finds:

(1) that the North Shore Gas Company, petitioner, is a corporation duly organized and existing under the laws of the State of Illinois and is engaged with charter powers so to do in the manufacture, distribution and sale of gas to the public in various municipalities and communities in Cook and Lake counties in the State of Illinois, and is a public utility within the meaning of "An Act concerning public utilities", as amended;

(2) that petitioner is now furnishing to the public in the said territory manufactured gas having an average heating value where it is produced of approximately 565 British thermal units per cubic foot and that the said gas is so distributed in and about the cities and villages of Bannockburn, Deerfield, Glencoe, Grays Lake, Gurnee, Highland Park, Highwood, Lake Bluff, Lake Forest, Libertyville, Mundelein, North Chicago, Russell, Thornbury, Waukegan, Winnetka, Winthrop Harbor, and Zion;

(3) that, contingent on the outcome of certain proceedings now pending before the Federal Power Commission, petitioner will have available for distribution to the public in substitution for the said manufactured gas, an adequate supply of natural gas and that petitioner proposes the distribution and sale to the public of straight natural gas having a heating value of approximately 1000 British thermal units per cubic foot;

(4) that the schedule of rates for natural gas service which petitioner proposes to make effective in each of the cities and villages specified and in their environs, will result in an average over-all saving to the present customers of petitioner of approximately 13.6% and will not result in increasing the bills of any of the present customers;

(5) that the proposed change in heating value of gas through the proposed change-over will result in a material increase in the capacity of petitioner's storage, transmission and distribution system and facilities by reason of the increased thermal content of the gas, and that both by reason of the said increased thermal content of the gas and by reason of the change in source of supply and by reason of new construction pursuant to the certificate of convenience and necessity herein authorized the ability of the petitioner to render adequate gas service to the public will be greatly incrsased;

(6) that in connection with the aforesaid change-over it will be necessary to make certain adjustments in consumers' gas burning appliances and that petitioner should at its own expense as soon as it starts the distribution of straight natural gas in the aforesaid communities proceed with reasonable dispatch to make, or cause to be made, necessary and appropriate adjustments or changes in consumers' gas burning appliances, all to the end that the said appliances be arranged to utilize with reasonable efficiency natural gas having a thermal content of approximately 1000 British thermal units per cubic foot;

(7) that the coke oven plant of the petitioner located in Waukegan is not suitable for use as a stand-by reserve and that the petitioner should be authorized to discontinue the operation of the said plant at the time of the change-over from manufactured to natural gas, and with respect to the amortization of the said plant the Commission will issue its further and supplemental order prescribing the manner and details of the said amortization;

(8) that petitioner should be authorized to discontine the supplying of manufactured gas in the cities and villages above specified and in their environs and to substitute in lieu thereof straight natural gas having a heating value of approximately 1000 British thermal units per cubic foot and to file and make effective a schedule of rates covering natural gas in the form of Petitioner's Exhibits 2 and 2-A as filed in this proceeding, such schedule to become effective for each of the said cities and villages and their environs upon the substitution therein of the proposed natural gas service for the present manufactured gas service, which schedules shall thereupon supersede and cancel the petitioner's existing schedules for manufactured gas service in the said communities;

(9) that in connection with the change from manufactured to natural gas service it will be necessary for petitioner to enlarge its present distribution system and to construct, operate and maintain a twelve-inch gas distribution main from a point just southeast of the Town of Grays Lake, Lake County, Illinois, to run in a general easterly direction through the petitioner's service territory connecting with existing gas mains running north and south, and to construct such distribution main along the route generally described as follows:

Commencing on the south side of the unimproved road known as Peterson Road at approximately the north west corner of the southwest quarter of Section 7, Township 44 North, Range 11, East of the Third Principal Meridian, County of Lake, State of Illinois, and extending eastwardly approximately 3,180 feet on said Peterson Road right-of-way through the above-mentioned Section 7, Township 44 North, Range 11, East of the Third Principal Meridian, to the intersection of Peterson Road with Milwaukee Road (State Route 21), thence continuing eastwardly approximately 8,700 feet along south side of said Milwaukee Road right-of-way to the intersection of Milwaukee Road with State Route 65 and Buckley Road (State Route 20), thence eastwardly approximately 19,475 feet on the South side of Buckley Road right-of-way to the intersection of Buckley Road with Telegraph Road (State Route 42-A), thence approximately 8,275 feet on the south side of Buckley Road right-of-way to the intersection of Buckley Road and Green Bay and Downey Roads, said intersection known as Five Points, and thence eastwardly approximately 5,000 feet on Downey Road to Sheridan Road (State Route 42) in the North West Quarter of Section 9, Township 44 North, Range 12, East of the Third Principal Meridian.

(10) that it may be necessary for petitioner to use an alternate route in place of a portion of the above route, the above route and the alternate route having been approved by the State Highway Department and the use of an alternate route being dependent upon certain improvements to be made by the State of Illinois Highway Department, said alternate route to conform with the above described route only to the point mentioned on Buckley Road at the intersection of Telegraph Road (State Route 42A), Northeast quarter of Section 12, Township 44 North, Range 11, East of the Third Principal Meridian, from which point the alternate plan is as follows:

to extend southwardly approximately 12,700 feet on Telegraph Road to the intersection of Rockland Road in the North West Quarter of Section 19, Township 44 North, Range 12, East of the Third Principal Meridian, and to extend north from above-mentioned point at Buckley Road and Telegraph Road one mile plus or minus on Telegraph Road and thence eastwardly through a part of Section 1, Township 44 North, Range 11, East of the Third Principal Meridian, through Sections 6, 5 and 4, Township 44 North, Range 12, East of the Third Principal Meridian, into the City of North Chicago;

said route and alternate route being designated on the plat received in evidence as petitioner's Exhibit 9; and

(11) that a certificate of convenience and necessity should be granted to petitioner for the construction, operation and maintenance of gas mains along the routes hereinabove specified.

IT IS THEREFORE ORDERED that North Shore Gas Company, an Illinois corporation, be, and it is hereby, authorized to change the type and heating value of gas distributed in the cities and villages, and their environs, of Bannockburn, Deerfield, Glencoe, Grays Lake, Gurnee, Highland Park, Highwood, Lake Bluff, Lake Forest, Libertyville, Mundelein, North Chicago, Russell, Thornbury, Winnetka, Waukegan, Winthrop Harbor and Zion, from manufactured gas having an average heating value of approximately 555 British thermal units per cubic foot to straight natural gas having a heating value of approximately 1000 British thermal units per cubic foot, said heating value standard of approximately 1000 British thermal units per cubic foot to continue in effect unless otherwise ordered by this Commission.

The gas herein authorized to be distributed shall, when it is tested in a place where it is consumed, have a monthly average heating value of not less than 1000 British thermal units per cubic foot and at no time shall the total heating value of the gas at such point be less than 950 British thermal units per cubic foot.

IT IS FURTHER ORDERED that the North Shore Gas Company be, and it is hereby required, at its own expense, as soon as it starts the distribution of gas in the aforementioned communities having a heating value content of approximately 1000 British thermal units per cubic foot, to proceed with reasonable dispatch to make, or cause to be made, changes in, or adjustments of, facilities and equipment used by its customers in the consumption of gas, to the end that service rendered in the use of such gas of approximately 1000 British thermal units per cubic foot shall be at least as efficient as the service which is now rendered in the use of manufactured gas.

IT IS FURTHER ORDERED that when the North Shore Gas Company increases the heating value of the gas distributed to its customers in the aforesaid communities to approximately 1000 British thermal units per cubic foot it shall cancel the schedules of rates for manufactured gas now in effect as set forth in petitioner's exhibit No. 1, and shall file a schedule of rates as set forth in petitioner's Exhibits Nos. 2 and 2-A filed herein, in such a manner as to make said rates available to customers of petitioner in the aforesaid communities.

IT IS FURTHER ORDERED that the permission herein granted shall not go into effect until such time as the Federal Power Commission has granted a permit to the Natural Gas Pipeline Company of America authorizing the furnishing of natural gas to petitioner, an application in that behalf having been filed by petitioner with Natural Gas Pipeline Company of America on November 1, 1945, a copy of said application having been received in evidence in this proceeding as petitioner's Exhibit 10.

IT IS FURTHER ORDERED that the North Shore Gas Company be, and it is hereby, authorized, upon the substituion of natural gas for manufactured gas as aforesaid, to discontinue the operation of its coke oven plant and to amortize the said plant, but the manner and details of the said plan of amortization will be covered in a subsequent order of this Commission and jurisdiction retained for that purpose.

IT IS FURTHER ORDERED that North Shore Gas Company notify the Commission in writing of the date on which the change to natural gas having a heating value of approximately 1000 British thermal units per cubic foot is made in each of the cities and villages hereinabove specified within five days of the date on which such change is effected.

IT IS FURTHER ORDERED that a certificate of convenience and necessity be, and it is hereby, granted to the North Shore Gas Company to enlarge its present distribution system by the construction, operation and maintenance of a twelve-inch distribution main from a point just Southeast of the Town of Grays Lake, Lake County, Illinois, from the pipe line of Natural Gas Pipeline Company of America, to run in a general easterly direction through the petitioner's service territory, connecting with existing gas mains running North and South, along the routes described in findings Nos. (9) and (10) above, said certificate being granted upon the express provision that authority or permission to use lands to be occupied by the above described mains shall be secured from landowners and/or public authorities as required by law.

The Commission expressly retains jurisdiction of the subject matter and parties for the purpose of taking such further action and issuing such further order in the premises as may appear necessary or proper, with respect to the amortization of the coke oven plant of the petitioner and with respect to any other matters where further action of this Commission may at any time appear appropriate.

By order of the Commission at Springfield, Illinois, this 8th day of January, 1946.

(Signed) JOSEPH F. GUBBINS
Secretary

(SEAL)

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

In the Matter of the Application of NORTH SHORE GAS COMPANY for Consent to and Approval of an Agreement for the Sale by NORTH SHORE GAS COMPANY of Its Coke Oven Plant Located in the City of Waukegan, Illinois, and for the Consent to and Approval of the Sale and Conveyance Provided for by the Said Agreement.	No. 3529[illegible]

O R D E R

On June 25, 1947, NORTH SHORE GAS COMPANY (hereinafter sometimes referred to as the "petitioner") filed herein with the Commission its verified petition praying therein for the consent and approval of the Commission to the agreement dated June 25, 1947, attached to said petition, as petitioner's Exhibit A, and hereinafter sometimes referred to as the "Agreement", entered into between the petitioner and WAUKEGAN COKE CORPORATION, a Delaware corporation (hereinafter sometimes referred to as "Buyer"), and for the consent and approval of the Commission to the sale and conveyance provided for therein, in accordance with the terms and provisions of the Agreement, to the Buyer by the petitioner, of the real estate and other property comprising its Coke Oven Plant located in Waukegan, Illinois (hereinafter sometimes referred to as the "Coke Oven Plant") as more fully described in the Agreement. A hearing was duly authorized by the Commission and held in this matter on June 26, 1947, before a duly authorized Examiner of the Commission, at the offices of the Commission, at Chicago, Illinois, at which hearing the petitioner presented its evidence in support of said petition and the matter is now duly submitted to the Commission for disposition.

From the said petition and the evidence submitted in support thereof, it appears that:

1. The petitioner is a corporation duly organized and existing under and by virtue of the laws of the State of Illinois and is a public utility within the meaning of Section 10 of Article I of an Act entitled: "An Act Concerning Public Utilities", as amended, now in force in the State of Illinois, and that the petitioner is authorized by its Articles of Incorporation, as amended, to own, operate and dispose of the Coke Oven Plant.

2. The petitioner is engaged, among other things, in the manufacture (subject to the statements made below), distribution and sale of gas in various municipalities and communities in Cook and Lake Counties in the State of Illinois. By an Order of this Commission entered on January 9, 1946, in Docket No. 33264, petitioner was authorized inter alia to change the type and heating value of the gas furnished by it by the furnishing of natural gas having a heating value of approximately 1,000 British Thermal units per cubic foot in lieu of manufactured gas having an average heating value of approximately 565 British Thermal units per cubic foot. The petitioner has completed the necessary installations for rendering of natural gas service; necessary adjustments in customers' gas burning appliances to enable

the use of natural gas in such appliances are being made throughout the territory served by petitioner, at petitioner's cost and expense. It is estimated by petitioner that the making of such adjustments will be substantially completed on or about July 15, 1947. Petitioner is now serving natural gas to about one-half its customers; it is anticipated by petitioner that its use of gas manufactured at the Coke Oven Plant will be discontinued no later than the date of consummation of the sale.

3. In the above mentioned Order of the Commission entered on January 8, 1946, the Commission found <u>inter alia</u>, as follows:

> "(7) that the coke oven plant of the petitioner located in Waukegan is not suitable for use as a stand-by reserve and that the petitioner should be authorized to discontinue the operation of the said plant at the time of the change-over from manufactured to natural gas, and with respect to the amortization of the said plant the Commission will issue its further and supplemental order prescribing the manner and details of the said amortization;"

4. The evidence shows that the North Shore Gas Company has made provision for a reserve or stand-by supply of gas, by constructing two plants for producing so-called propane/air gas, these having a combined capacity of ten million cubic feet of gas per day. In addition the existing water plant is being converted to produce 1000 B.T.U. gas. The capacity of this plant, so converted, is two million cubic feet per day. Holder capacity in the amount of four million cubic feet is now provided.

These measures provide a reserve or stand-by capacity of twelve million cubic feet of high B.T.U. gas a day, in addition to four million cubic feet of gas in the holders when they are filled.

The present natural gas supply is obtained from the pipe line of the Natural Gas Pipe Line Company of America. There is presently allocated to petitioner from the pipe line 10,200,000 cubic feet per day maximum. The reserve or stand-by capacities are thus in excess of 100% of the quantities of gas to be taken from the pipe line on a maximum day. This is also approximately the expected load on the system for a peak day during the ensuing winter.

In addition to the foregoing provisions, it appears that 500 B.T.U. gas from the operation of the Coke Oven Plant will be available if needed in an emergency, and this gas can be enriched to bring it to 1000 B.T.U. heating value content. Gas so obtained and enriched would however cost five to six times as much as straight natural gas, but it might be used in an emergency. To permit this, it is proposed to leave in place a 16" connecting main and other facilities, so that the gas can be transmitted to the present "north station" of petitioner.

It therefore appears that the proposed sale of the Coke Oven Plant as here proposed will not interfere with the ability of the petitioner to discharge its duties as a public utility.

5. The petitioner desires to sell and convey to Buyer, and Buyer desires to purchase and acquire from petitioner, the property constituting and comprising the Coke Oven Plant, including the real estate together with the buildings, structures, erections and constructions thereon, and certain personal property, including machinery, tools

and equipment, and operating materials and supplies, all as more fully set forth in the Agreement.

6. The petitioner is informed that Buyer is a Delaware corporation and proposes to use the Coke Oven Plant to be acquired by it from petitioner for the purpose of manufacturing coke for industrial purposes, and that Buyer is not a public utility within the meaning of Section 10 of Article I of an Act entitled: "An Act Concerning Public Utilities", as amended, and now in force in the State of Illinois. Petitioner and Buyer are not "affiliated interests" within the meaning of Section 8(a) of said Act.

7. The sale and conveyance provided for in the Agreement are made subject to certain conditions precedent, including, among other things, the entering of an appropriate order of consent and approval of the Agreement, and of the sale and conveyance provided for therein, by the Commission and the obtaining of a release of the property to be sold from the lien of the Indenture mentioned below.

8. The purchase price provided for in the Agreement is the sum of $650,000. The Agreement also provides for the proration of taxes for the year 1947 and for the sale of miscellaneous products produced at the Coke Oven Plant at the cost thereof.

9. The purchase price to be paid for the Coke Oven Plant and other property to be sold under the terms of the Agreement represents the fair value thereof, on the date of the filing of the said petition, and said purchase price was determined by arm's length bargaining and negotiation by officers of petitioner and representatives of Buyer.

10. The Coke Oven Plant is subject to the lien of the Indenture dated December 1, 1941 of petitioner to Continental Illinois National Bank and Trust Company of Chicago, as Trustee, and the sale and conveyance provided for by the Agreement are subject to the condition precedent that the Company shall have obtained the release of the Coke Oven Plant and other property to be sold and conveyed under the terms of the Agreement, from the lien of said Indenture pursuant to the provisions thereof. Petitioner proposes, in connection with securing said release, to deposit $650,000 with said Trustee, pursuant to and in accordance with the terms and provisions of said Indenture.

11. The petitioner cannot at this time present to the Commission a plan of amortization of the Coke Oven Plant, and has requested the Commission to retain jurisdiction with respect to the manner and details of the plan of amortization thereof.

The Commission having considered the said verified petition and the evidence presented in support thereof and being fully advised in the premises, is of the opinion and finds that:

(1) The Commission has jurisdiction of petitioner and of the subject-matter of said verified petition.

(2) The recitals of fact hereinabove set forth in this Order are supported by the evidence introduced in the record herein.

(3) The consent and approval of the Commission should reasonably be granted to the Agreement in and to and of the sale and conveyance therein provided by the petitioner to the Buyer, in accordance with the terms and provisions of the Agreement.

(4) The jurisdiction of the Commission should be retained with respect to the manner and details of the plan of amortization of petitioner with respect to the Coke Oven Plant.

(5) The prayer of said verified petition may reasonably be granted and the public will be convenienced thereby.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission as follows:

(A) That the consent, approval and authorization of the Commission be and the same are hereby granted to the Agreement.

(B) That the consent, approval and authorization of the Commission be and the same are hereby granted to North Shore Gas Company to sell and convey said Coke Oven Plant as described in the Agreement to Waukegan Coke Corporation for the consideration of $650,000.

(C) That the consent, approval and authorization of the Commission be and the same are hereby granted to North Shore Gas Company to convey and transfer said Coke Oven Plant and other property to be sold and conveyed as described in, and in accordance with the terms and provisions of, the Agreement to Waukegan Coke Corporation, by executing, acknowledging and delivering to said corporation such deed or deeds of conveyance, bill or bills of sale and other instrument or instruments of transfer or assignment as may be appropriate, proper or desirable.

IT IS FURTHER ORDERED that the jurisdiction of the Commission is hereby retained with respect to the manner and details of the plan of amortization as to said Coke Oven Plant.

IT IS FURTHER ORDERED that North Shore Gas Company be and hereby is authorized to execute all instruments and to perform all acts necessary to give effect to the prayer contained in said verified petition of North Shore Gas Company filed in this matter on June 25, 1947, and that all of said instruments and all of said acts are hereby consented to, approved and authorized.

By order of the Commission at Chicago, Illinois, this 26th day of June, 1947.

JOSEPH F. GUBBINS
Secretary

(SEAL)

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

In the matter of the application of North Shore Gas Company for an order authorizing changes in the type and heating value of gas distributed in various cities and villages in Cook and Lake counties, Illinois, the approval of Revised Rate Schedules, and authorizing the abandonment of coke plant operation and recovery of the undepreciated cost of this plant on a plan of amortization against future earnings.	:	33264

CERTIFICATE OF CONVENIENCE AND NECESSITY

WHEREAS, the North Shore Gas Company, hereinafter referred to as the petitioner, is a corporation duly organized and existing under the laws of the State of Illinois and is engaged, among other things, with charter powers so to do, in the business of distributing and selling gas to the public in various municipalities and places in the State of Illinois, and as such is a public utility, subject to the jurisdiction of this Commission; and

WHEREAS, the said petitioner has made application to this Commission for a certificate of convenience and necessity to construct, operate and maintain certain extensions of its gas distribution facilities and to transact a gas public utility business in connection therewith, as hereafter more particularly described; and

WHEREAS, this Commission by order duly entered in the above entitled cause has authorized the issuance of a certificate of convenience and necessity for (1) the construction, operation and maintenance of a twelve-inch gas distribution main to run in a general easterly direction through petitioner's service territory connecting with existing gas mains of petitioner running north and south, and to construct such distribution main along the route general described as follows:

Commencing on the south side of the unimproved road known as Peterson Road at approximately the northwest corner of the southwest quarter of Section 7, Township 44 North, Range 11, East of the Third Principal Meridian, County of Lake, State of Illinois, and extending eastwardly approximately 3,160 feet on said Peterson Road right-of-way through the abovementioned Section 7, Township 44 North, Range 11, East of the Third Principal Meridian, to the intersection of Peterson Road with Milwaukee Road (State Route 21), thence continuing eastwardly approximately 8,700 feet along south side of said Milwaukee Road right-of-way to the intersection of Milwaukee Road with State Route 63 and Buckley Road (State Route 20), thence eastwardly approximately 19,475 feet on the South side of Buckley Road right-of-way to the intersection of Buckley Road with Telegraph Road (State Route 42-A), thence approximately 8,275 feet on the South side of Buckley Road right-of-way to the intersection of Buckley Road and Green Bay and Downey Roads, said intersection known as Five Points, and thence eastwardly approximately 5,000 feet on Downey Road to Sheridan Road (State Route 42) in the North West Quarter of Section 9, Township 44 North, Range 12, East of the Third Principal Meridian;

and since it may be necessary for petitioner to use an alternate route in place of a portion of the above route, the above route and the alternate route having been approved by the State Highway Department and the use of an alternate route being dependent upon certain improvements to be made by the State of Illinois Highway Department, said alternate route to conform with the above described route only to the point mentioned on Buckley Road at the intersection of Telegraph Road (State Route 42A) Northeast quarter of Section 12, Township 44 North, Range 11, East of the Third Principal Meridian, from which point the alternate plan is as follows:

to extend southwardly approximately 12,700 feet on Telegraph Road to the intersection of Rockland Road in the North West Quarter of Section 19, Township 44 North, Range 12, East of the Third Principal Meridian, and to extend north from abovementioned point at Buckley Road and Telegraph Road one mile plus or minus on Telegraph Road and thence eastwardly through part of Section 1, Township 44 North, Range 11, East of the Third Principal Meridian, through Sections 6, 5, and 4, Township 44 North, Range 12, East of the Third Principal Meridian, into the City of North Chicago;

said route and alternate route being designated on the plat received in evidence as petitioner's Exhibit 9; and (2) the transaction of the business of furnishing natural gas to the public along the route of the aforesaid gas main; NOW THEREFORE

IT IS HEREBY CERTIFIED that public convenience and necessity require the construction, operation and maintenance of the gas distribution lines and facilities and the transaction of a natural gas public utility business, all as hereinbefore described.

THIS CERTIFICATE is issued by the Illinois Commerce Commission to the aforesaid petitioner pursuant to the provisions of Section 55 of "An Act concerning public utilities", as amended, and by virtue of an order of this Commission hereinbefore referred to and duly entered in this cause on this 8th day of January, 1946, and subject to the terms and conditions of the said order.

JOSEPH F. GUBBINS (Signed)

Secretary

SEAL
ILLINOIS COMMERCE COMMISSION

Exhibit J

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS; That the undersigned North Shore Gas Company, an Illinois corporation, for and in consideration of One ($1.00) Dollar and other valuable considerations to it in hand paid, receipt whereof is hereby acknowledged, does hereby sell, assign, transfer and set over unto Waukegan Coke Corporation, a Delaware corporation, all the undersigned's right, title,and interest in and to the goods and chattels described in Exhibit "A" attached hereto and made a part hereof.

To have and hold, all and singular, the said goods and chattels to the said Waukegan Coke Corporation and its assigns forever.

The undersigned warrants that it has due and lawful authority to convey to Waukegan Coke Corporation all the aforesaid goods and chattels and that the same are free and clear of all liens and encumbrances of every kind, name and description whatsoever, and the title hereby conveyed the undersigned shall forever warrant and defend.

IN WITNESS WHEREOF, the undersigned has caused this instrument to be executed by its President, and its corporate seal to be hereunto affixed by its Secretary this 9th day of July, A.D. 1947.

NORTH SHORE GAS COMPANY

By A. W. Conover /s/
President

ATTEST:

C. J. Mulholland /s/
Secretary
(Seal)

STATE OF ILLINOIS)
) SS
COUNTY OF LAKE)

On this 9th day of July 1947, before me appeared A. W. Conover, to me personally known, who being by me duly sworn, did say that he is the President of North Shore Gas Company, and that the seal affixed to the within instrument is the corporate seal of said corporation, and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors, and said A. W. Conover acknowledged said instrument to be the free act and deed of said corporation.

J. R. Hess /s/
Notary Public, Lake County, Illinois

My Commission Expires Nov. 4-1950

AFFIDAVIT

STATE OF ILLINOIS)
) SS
COUNTY OF LAKE   )

The undersigned deposes and says that he is the President of North Shore Gas Company, the vendor named in the within Bill of Sale; that he has knowledge of the facts, and that the consideration for the same was actual and adequate, and that the same was given in good faith for the purpose herein set forth, and not given for security or for the purpose of defrauding creditors or subsequent purchasers.

A. W. Conover /s/
President

Subscribed and sworn to before me this 9th day of July, 1947.

J. R. Hess /s/
Notary Public, Lake County, Illinois

My Commission Expires Nov. 4, 1950

Boiler and Boiler Plant Equipment:

2 - 511 HP Heinie Boilers with Cox Stokers and auxiliary equipment
1 - Air Compressor
2 - Boiler Feed Pumps
2 - Electric Pumps)
1 - Gas Engine Pump) In Power Plant for
1 - Steam Turbine Fire Pump) Water Supply System

Electric Power Equipment:

2 - 750 KVA Allis Chalmers Generators and auxiliary equipment
1 - Turbo Exciter
1 - Switchboard and Gear
Transmission Equipment and Sub-Station

Coke Ovens:

31 - Koppers complete ovens with auxiliary equipment
Pusher - Larry Car - Quenching Car - Door Machine
Collector Mains

Producer Plant Equipment:

1 - 10" Koppers Gas Producer and auxiliary equipment

Coal Handling Equipment:

1 - Pennsylvania Crusher
4 - Mixing Machines
1 - Sauerman 7 yard Drag Line System complete
1 - Mead-Morrison Fast Unloader (On Coal Deck)

Coke Handling Equipment:

3 - Gyrex Screens
1 - Gyrex Rescreen
1 - Buckwheat Vibrex Screen
1 - Coke Crusher
1 - Car Loader and Loading Boom
1 - Set Calcium Chloride Storage and Mixing Tanks and Spraying Apparatus

Purification Equipment:

1 - Liquid Gas Purifier System

By-Products Equipment:

2 - Saturators
2 - P and A's
1 - NH3 Still
2 - Exhausters
3 - Gas Coolers
1 - Napthalene Scrubber
5 - Tanks
1 - Tar Decanter
1 - Conveyer

Automobile Equipment:

1 - 1940 Plymouth, 2-Door Sedan, Factory No. 1421812, Engine No. P9-248161

Machine Shop Equipment:

2 - Lathes
1 - Radial Drill
1 - Shaper
1 - Grinder
1 - Saw

Laboratory Equipment:

4 - Laboratory Balances
Distellation Rack with Cooling Trough and Bunson Burners
1 - Burette Table
Supply of Glassware (Laboratory)
2 - Electric Muffles)
1 - Gas Hot Plate) In three section hood
1 - Gas Distillation Equipment)
1 - Water Still
Laboratory Benches
1 - Two Section Hood
4 - Portable Gas Meters
2 - Electric Drying Ovens
1 - Compressor Machine
1 - Orsat Apparatus
1 - Junkers Calorimeter
1 - Bomb Calorimeter
1 - Ash Fusion Furnace
Stock of Laboratory Supplies

Miscellaneous Equipment:

Surveying Instruments: Transit and Level
Truck Scale, 75 Ton, Fairbanks Morse
Truck Scale, 20 Ton, Fairbanks Morse
2 - Caterpillar, 15-ton Cranes
9 - Hopper Cars
2 - Yard Locomotives
2 - Reclaim Cars
2 - Yard Screens
5 - Portable Conveyors
1 - Car Unloader

Service Building Equipment:

62 - Single Lockers
6 - Banks, each Double Lockers
12 - Benches
2 - Circular Wash Stands
4 - Shower Units

Johnson Motor Steam Line:

Overhead

EXHIBIT A - PAGE 3

OFFICE FURNITURE AND EQUIPMENT

General Office Building

1 Burroughs Hand Operated Adding Machine - Serial No. 8-1136839

1 Burroughs Hand Operated Adding Machine - Serial No. A-576777

1 Burroughs Hand Operated Adding Machine on Stand - Serial No. 4-1229569

1 Monroe Calculator Electric Operated Serial No. KA161-86557

1 Underwood Typewriter Standard Model No. 3 Serial No. 771050-11

1 Remington Standard Typewriter Model No. 16 Serial No. Z438002

1 Remington Standard Typewriter Serial No. 5050

1 Office Safe (Combination) Standard type - Remington

10 Four drawer steel Filing Cabinets

1-18 drawer steel Filing Cabinet (card)

2 Desks, Typewriter

5 Desks, Standard Flat top

3 Tables, long, one with glass top

5 Arm Chairs, round back, dark,

6 Chairs, swivel, 3 dark, 3 light

7 Chairs, straight back, light

9 Steel Lockers (wash room)

2 Wooden Benches, reception room

37 Steel, padded, folding chairs

23 Steel, 3 section, file bins

1 Small Steel Cabinet, key lock, (in vailt) 2 door

1 Four Section bookcase wooden base and top

1 Two Section bookcase wooden base and top

Laboratory Office Equipment

2 Tables, office, one with two drawers and glass top

1 Desk, standard, flat top

2 Three Section, 4 door, wooden base and top, Cabinets

1 Swivel Chair

3 Straight Back Chairs

2 Book Cases, 3 section, glass door wooden top and base

1 Four Drawer steel Filing Cabinet

2 Five Drawer Steel Filing Cabinets

1 Five Section, book case, wooden top and base, glass doors

Scale House

1 Swivel Chair

1 Straight back Chair

WARRANTY DEED

THIS INDENTURE WITNESSETH, that the Grantor, NORTH SHORE GAS COMPANY, an Illinois Corporation, having its principal office at 209 Madison Street, Waukegan, Illinois, for the consideration of One Dollar ($1.00) and other good and valuable consideration, and pursuant to authority given by the Board of Directors of said corporation, under a resolution thereof adopted June 25, 1947, CONVEYS and WARRANTS unto WAUKEGAN COKE CORPORATION, a Delaware corporation, duly authorized to do business in the State of Illinois, the following described Real Estate, to-wit:

Commencing at the South West corner of the North West quarter of Section 22, Township 45 North, Range 12 East of the 3rd P. M., Waukegan Township Lake County, Illinois; thence North Easterly, making a North East angle of 89 degrees and 29 minutes with the East and West center line of said Section 22, to a point on the North line of City Street, 66 feet from, measured at right angles, the East and West center line of said Section 22; thence East with and along the North line of said City Street, parallel to the East and West center line of said Section 22, 585.37 feet to a point on the North Westerly line of Harbor Street; thence North Easterly, with and along said North Westerly line of Harbor Street and making a North Easterly angle of 75 degrees, 12 minutes and 10 seconds with last described course extended East 119.43 feet to a point; thence East, parallel to and 181.47 feet from, measured at right angles, the said center line of Section 22, 373.61 feet to a point; thence North Easterly, making a North Easterly angle of 60 degrees, 1 minute and 15 seconds with last described course extended East 417.44 feet to the point of beginning: thence East parallel to, and 543.06 feet from, measured at right angles, the said center line of Section 22, and making a South Easterly angle of 119 degrees, 58 minutes and 45 seconds with last described course, 1389.49 feet, more or less, to a point on the shore line of Lake Michigan, (this course to be known as the first course); thence North Westerly, with and along said shore line to an intersection with a line running parallel with and 1420 feet North of, measured at right angles, the South line of the property hereby conveyed, being the said first course, (this course along said shore line to be known as the second course), said shore line being approximately as follows, running Northerly and making a North Westerly angle of 88 degrees and 55 minutes with said first course, 179.16 feet to a point; thence North Easterly, continuing along said shore line and making a North Easterly angle of 4 degrees 59 minutes and 15 seconds with last described course extended Northerly 675.5 feet to a point; thence continuing North Easterly, with and along said shore line and making a North Easterly angle of 4 degrees, 52 minutes and 45 seconds with last described course extended Northerly, 573.67 feet to a point, (end of description of shore line); thence West, 1250.39 feet to a point, (this course to be known as the third course), the last described course also being parallel to and 1420 feet North of, measured at right angles, the South line of property herein described; thence South Westerly, making a South Easterly angle of 100 degrees 31 minutes and 36 seconds with last described course, (being the said third course), 1430.2 feet to a point, (this course to be known as the fourth course); thence continuing South Westerly and making a South Westerly angle of 19 degrees, 27 minutes and 9 seconds with last described course extended Southerly (being the fourth course), 16.03 feet to the point of beginning, (this course to be known as the fifth course), together with all accretions thereto and the riparian rights appurtenant thereto, but subject to any right, title and interest of the Elgin, Joliet and Eastern Railway Company in and to the steel rails, ties and switches and other materials of the railroad track upon said premises, and together with an easement for the purposes of ingress and egress between the property described herein and the public streets of the City of Waukegan granted by the Elgin, Joliet and Eastern Railway Company in the deed dated March 14, 1927 and recorded March 16, 1927, in Book 262 of Deeds, page 610, as Document 295717, in the Office of Recorder of Deeds of Lake County, Illinois, and together with the buildings, structures, erections and constructions on the above described real estate, and all and singular the tenements, hereditaments and appurtenances thereto belonging or in any way appertaining, situated in the City of Waukegan, County of Lake and State of Illinois.

The foregoing tract is conveyed subject to general taxes for the year 1947 and thereafter and to zoning and building ordinances, the existing channel across said premises, and to all the terms, conditions and covenants contained in the certain deed of Elgin, Joliet and Eastern Railroad Company dated March 14, 1927 (recorded March 16, 1927 in the Office of the Recorder of Deeds of Lake County, Illinois in Book 262 of Deeds, page 610, as Document 295717), conveying said premises to William A. Baehr, the obligations thereof the North Shore Coke & Chemical Company (a Delaware corporation), assumed as grantee in the certain deed of the said William A. Baehr and Mabel S. Baehr, his wife, dated March 14, 1927, (recorded March 16, 1927 in the Office of the Recorder of Deeds of Lake County, Illinois in Book 262 of Deeds, page 608, as Doc. 295716) as modified or discharged by (i) a certain deed from said corporation to the City of Waukegan, Illinois, dated October 27, 1927 (recorded April 22, 1929 in the Office of the Recorder of Deeds of Lake County, Illinois, in Book 335 of Deeds, page 582 as Doc. 335250) conveying a strip of land 100 feet in width across said property; (ii) a certain deed from the City of Waukegan, Illinois, to said corporation, dated July 30, 1935, (recorded July 31, 1935 in the Office of the Recorder of Deeds of Lake County, Illinois in Book 413 of Deeds, page 277 as Doc. 415306) reconveying the said strip of land 100 feet in width to the Coke Company, and (iii) a certain deed from said corporation to the City of Waukegan, Illinois, dated July 31, 1935 (recorded August 2, 1935 in the Office of the Recorder of Deeds of Lake County, Illinois in Book 413 of Deeds, page 288 as Doc. 415332) conveying a perpetual easement to the City of Waukegan to maintain and use a roadway on and along a strip of land 50 feet in width across the above described premises.

IN WITNESS WHEREOF, said Grantor has caused its corporate seal to be hereto affixed, and has caused its name to be signed to these presents by its President, and attested by its Secretary, this 28th day of June, A.D. 1947.

NORTH SHORE GAS COMPANY, an Illinois Corporation

BY A. W. Conover /s/
President

ATTEST:

C. J. Mulholland
Secretary

STATE OF ILLINOIS)
)SS.
COUNTY OF LAKE)

I, the undersigned, a Notary Public in and for said County in the State aforesaid, DO HEREBY CERTIFY that A. W. CONOVER personally known to me to be the President of the North Shore Gas Company, an Illinois corporation, and C. J. MULHOLLAND personally known to me to be the Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such President and Secretary, they signed and delivered the said instrument as President and Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority, given by the Board of Directors of said corporation as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 28th day of June, A.D. 1947.

Notary Public.

CHEVROLET - CENTRAL OFFICE

DIVISION OF GENERAL MOTORS CORPORATION

DETROIT. 2. MICHIGAN

GENERAL MOTORS BUILDING

August 19, 1948

Exhibit K

North Shore Gas Company
Waukegan, Illinois

Attention: Mr. C. J. Mulholland
Secretary - Treasurer

Gentlemen:

Enclosed is our check in the amount of $5,666.29 representing a refund due your Company on your payment of $18,660.32 for your portion of the Waukegan, Illinois taxes for the first six months of the year.

This is in accordance with the request contained in your letter of July 26 addressed to the Chevrolet Saginaw Grey Iron Foundry, Waukegan, Illinois, to the attention of Mr. Rudolph.

Yours very truly,

H H Geist

H. H. Geist
Insurance & Tax Dept.

HHG:dn
enc.

cc: Mr. L. Rudolph

Waukegan, Illinois

July 26, 1948

Chevrolet-Saginaw Grey Iron Foundry
Division of General Motors
P.O. Box 598
Waukegan, Illinois

Attention: Mr. Rudolph

Gentlemen:

I am enclosing herewith both the real estate and personal property tax assessment statements for the year 1947 for the property at the time the assessment was made in the name of the North Shore Gas Company - Coke Oven Division. These bills are as follows:

	100% Assessed Valuation	Total Tax
Personal Property	$506,146	$ 10,203.89
Real Estate	782,945	15,784.18
Total Tax		$ 25,988.07

At the time of the settlement for the coke oven property between the North Shore Gas Company and the Waukegan Coke Corporation, North Shore Gas Company advanced the payment of $18,660.32 which was to cover the North Shore Gas Company's portion for the first six months of the year. Inasmuch as the prorata share of the $25,988.07 mentioned above, or half of this amount, would be $12,994.03, it appears that the North Shore Gas Company should have a refund from your corporation in the amount of $5,666.29.

For your [illegible] information I might advise that under date of February 2, 1948, [illegible] was received from Mr. Henry E. Hogan, General Counsel for [illegible] Motors Corporation, confirming our understanding in this matter. [illegible] at your early convenience, won't you kindly let our refund [illegible] have [illegible]?

Yours very truly,

C. J. Mulholland
Sec'y.-Treasurer

CJM:ms

NORTH SHORE *Gas* COMPANY

Waukegan, Illinois

February 3, 1948

COPY

Mr. Henry M. Hogan, General Counsel
General Motors Corporation
General Motors Building
3044 West Grand Boulevard
Detroit 2, Michigan

Dear Mr. Hogan:

I wish to acknowledge with thanks your kind letter of February 2, replying to my letter of January 16, addressed to Mr. R. E. Hammond, Comptroller of General Motors Corporation.

The letter to Mr. Hammond desired a confirmation as to a dividend refund due for an apparent over-payment of real estate and personal property taxes in the consummation of the sale of the North Shore Gas Company's coke oven plant to Waukegan Coke Corporation as of July 1, 1947.

We appreciate your very kind consideration of our request, and your recognisance of the fact that if the tax bills submitted for 1947 on the property referred to above are lower than the tax bills on the properties for 1946, so that the amount contributed toward 1947 taxes by North Shore Gas Company should be in excess of one-half of the actual 1947 taxes, a refund would be made to North Shore Gas Company.

By the same token, if the actual tax bills for 1947 should be in excess of the 1946 tax on the properties in question, so that the contribution made by North Shore Gas Company should prove to be less than one-half of the 1947 actual taxes, North Shore Gas Company will stand ready to reimburse General Motors Corporation for the difference.

Very truly yours,

C. J. Mulholland,
Sec'y.-Treasurer

Waukegan, Illinois

February 3, 1948

Mr. Henry M. Hogan, General Counsel
General Motors Corporation
General Motors Building
3044 West Grand Boulevard
Detroit 2, Michigan

Dear Mr. Hogan:

I wish to acknowledge with thanks your kind letter of February 2, replying to my letter of January 16, addressed to Mr. R. E. Hammond, Comptroller of General Motors Corporation.

The letter to Mr. Hammond desired a confirmation as to a dividend refund due for an apparent over-payment of real estate and personal property taxes in the consummation of the sale of the North Shore Gas Company's coke oven plant to Waukegan Coke Corporation as of July 1, 1947.

We appreciate your very kind consideration of our request, and your recognizance of the fact that if the tax bills submitted for 1947 on the property referred to above are lower than the tax bills on the properties for 1946, so that the amount contributed toward 1947 taxes by North Shore Gas Company should be in excess of one-half of the actual 1947 taxes, a refund would be made to North Shore Gas Company.

By the same token, if the actual tax bills for 1947 should be in excess of the 1946 tax on the properties in question, so that the contribution made by North Shore Gas Company should prove to be less than one-half of the 1947 actual taxes, North Shore Gas Company will stand ready to reimburse General Motors Corporation for the difference.

Very truly yours,

C. J. Mulholland,
Sec'y.-Treasurer

GENERAL MOTORS CORPORATION

GENERAL MOTORS BUILDING

3044 WEST GRAND BOULEVARD

DETROIT 2, MICHIGAN

February 2, 1948

North Shore Gas Company
Waukegan, Illinois

Attention: Mr. C. J. Mulholland, Sec'y.-Treasurer

Dear Sir:

This will acknowledge receipt of your letter of January 16, 1948, addressed to the attention of Mr. R. E. Hammond, Comptroller, General Motors Corporation.

You advise that Messrs. Arthur Young & Company are now engaged in making the annual audit of your books and records for the North Shore Gas Company for the year ending December 31, 1947, and desire confirmation as to a dividend refund due for an apparent overpayment of real estate and personal property taxes in the consummation of the sale of the North Shore Gas Company Coke Plant to Waukegan Coke Corporation as of July 1, 1947.

While it may be observed that from a technical interpretation of the Agreement between North Shore Gas Company and Waukegan Coke Corporation dated June 25, 1947, there would be no obligation to make an adjustment of 1947 taxes, we recognize the intent of the parties at that time was to make an adjustment at a later date if the adjustment based on 1946 taxes proved to be out of line.

Accordingly, if the tax bill submitted for the year 1947 is lower than the tax bill on the properties for 1946 so that the amount contributed towards 1947 taxes by North Shore Gas Company should be in excess of one-half of the actual 1947 taxes, a refund will be made to North Shore Gas Company.

By the same token, however, if the actual tax bill for 1947 should be in excess of the 1946 tax on the properties so that the contribution made by North Shore Gas Company should prove to be less than one-half of the 1947 actual taxes, North Shore Gas Company will reimburse us for the difference.

The above reflects our understanding of the Agreement between parties and we will be judged accordingly. If this is not in line with your understanding, kindly advise us immediately.

Very truly yours,

Henry M. Hogan

Henry M. Hogan
General Counsel

LHB:ms

cc: Arthur Young & Company
1 North LaSalle Street
Chicago 2, Illinois

GENERAL MOTORS CORPORATION

GENERAL MOTORS BUILDING
3044 WEST GRAND BOULEVARD
DETROIT 2, MICHIGAN

January 20, 1948

Mr. C. J. Mulholland, Sec'y Treasurer
North Shore Gas Company
Waukegan, Illinois

Dear Sir:

This will acknowledge receipt of your letter of January 16, 1948 relative to property tax adjustment on the sale of your Waukegan Coke Plant to the Waukegan Coke Corporation. Your letter has been referred to our attorney who handled the transaction and he will write you on the matter.

Yours very truly,

J. A. Sarason
J. A. Sarason
Assistant Comptroller

JAS/st

[illegible]

1945 Taxes

182030	15,349.74
178450	15,096.37

Waukegan, Illinois

January 16, 1948

Mr. R. E. Hammond, Comptroller
General Motors Corporation (Waukegan Coke Corporation)
3044 West Grand Boulevard
Detroit 2, Michigan

Dear Sir:

Messrs. Arthur Young & Company, 1 North LaSalle Street, Chicago 2, Illinois are now engaged in making the annual audit of our books and records for the NORTH SHORE GAS COMPANY for the year ending December 31, 1947 and desire confirmation from you as to a tentative refund due us for an apparent overpayment of real estate and personal property taxes in the consummation of the sale of the Company's coke plant to your corporation as of July 1, 1947.

On July 15, 1947, we paid your company the sum of $18,660.32 which was described as follows in the accompanying voucher:

To cover first six months of 1947 personal property and real estate taxes on coke oven plant property based on 1946 taxes paid in 1947.
Taxes paid -

Personal property	- valuation $1,049,715	- tax	$18,464.99
Real estate	- valuation 1,070,775	- tax	18,855.64
		Total tax	$37,320.63
One half paid by this voucher			$18,660.32

It now appears, from representations made to us by the Assessor in Waukegan, Illinois, that the valuations arrived at by his office will be forwarded to the Board of Review as follows:

Personal property	- 1947 valuation	$470,700
Real estate	- 1947 valuation	728,120

The tax rate for 1946 was $1.76 for each $100 of valuation and while the 1947 rate has not been announced, still it will presumably not be less and might conceivably be more, say 5% more, or an estimated rate of $1.85 which we could use for accounting purposes in order to adjust our records for the close of business December 31, 1947 and for income tax purposes in determining the proper deduction for these taxes in the return to be filed for the calendar year 1947.

Waukegan, Illinois,

September 8, 1947

Mr. Carl [illegible]
Pam, Hurd & Reichmann
231 South LaSalle Street
Chicago 4, Illinois

Dear Carl:

Replying to your inquiry of September [illegible] with respect to the portion of 1947 taxes to be paid by us with the sale of [illegible] Coke Plant to the Waukegan Coke Corporation, [illegible] copy of a letter which accompanied the [illegible] of our [illegible] Waukegan Coke Corporation for the taxes in question. I [illegible] will find the copy of the letter self explanatory.

Very truly yours,

[illegible]

Upon this assumption our proportion of the 1947 tax bill might be summarized as follows:

Personal property - valuation $470,700 at rate of $1.85 or	$ 8,707.95
Real estate - valuation 728,120 at rate of 1.85 or	13,470.22
	$22,178.17
One half of this amount for the first six months of 1947	$11,089.09
Previously paid to you	18,660.32
Tentative overpayment	$ 7,571.23

We would be glad to have you review the matter at this time and advise our auditors direct as to whether this sum of $7,571.23 may be considered as approximately the amount that might be refunded to us, subject of course to the receipt of the actual tax bills that will not be submitted for several months.

An expression from you at this time will be greatly appreciated toward the end that we may make some proper entries to reflect the status of this particular item in the current year's (1947) closing of accounts.

Your courtesy in the matter will oblige,

Yours very truly,

G. J. Mulholland
Sec'y.-Treasurer

ANDREW J. DALLSTREAM
SYDNEY K. SCHIFF
ARTHUR M. COX
OSCAR O. STERN
LOUIS S. HARDIN
QUERIN P. DORSCHEL
NORMAN WAITE
LESTER G. BRITTON
FREDRIC H. STAFFORD
ROBERT F. WEBSTER

CARL H. URIST
JOHN J. WALDRON
MILTON H. COHEN
MARY K. LINDLEY
JOHN B. ROBINSON, JR.
JOHN YONCO
J. HERBERT BURKE
JOHN M. CLARK
GEORGE B. PLETSCH
M. L. MCNEILL
JAMES E. IVINS
HARVEY C. WEEKS
FRANKLIN BLISS SNYDER, JR.
KENNETH L. RICHMOND
NEWTON P. FRYE, JR.

PAM, HURD & REICHMANN
231 SOUTH LA SALLE STREET
CHICAGO 4

ALEXANDER F. REICHMANN
OF COUNSEL

MAX PAM 904-925
HARRY BOYD HURD 904-943
LINCOLN R. CLARK 927-94[illegible]

TELEPHONE CENTRAL 4500

September 4, 1947

Mr. C.J.Mulholland, Secy.-Treas.
North Shore Gas Company
209 Madison Avenue
Waukegan, Illinois

Dear Joe:

I have received an inquiry from Mr. Donahue of General Motors Co. calling my attention to the fact that with respect to the sale of the coke oven plant, the 1947 taxes were not prorated as it was decided to await receipt of the actual bill.

I was not aware of the situation and therefore wish to check on the matter with you before replying. I am wondering whether Mr. Donahue is referring to the tax bills which you will not receive until after January 1, 1948.

I will delay replying to Mr. Donahue until I hear from you.

Very truly yours,

PAM, HURD & REICHMANN

By Carl H. Urist

CHU:rkc

Waukegan, Illinois

July 15, 1947

Waukegan Coke Corporation
Box 586
Waukegan, Illinois

Gentlemen:

Enclosed herewith is North Shore Gas Company's check in the amount of $18,660.32, which covers the estimated amount of personal property and real estate taxes for the first 6-months of 1947. This is based on the taxes paid in 1946. You will recall that in the purchase agreement between North Shore Gas Company and Waukegan Coke Corporation, [illegible] that the seller shall pay to the purchaser in respect of 1947 real estate taxes a prorata amount thereof based on 1946 taxes, from January [illegible] 1947 to the date of the deed and bill of sale.

For your further information I might advise you that the 1946 taxes were paid during the month of June, 1947.

I trust that you find this voucher check to be in order.

Very truly yours,

G. J. [illegible]
Sec'y.-Treasurer

[illegible]

NORTH SHORE *Gas* COMPANY

Waukegan, Illinois

February 17, 1947

COPY

Exhibit L

To the Mayor and City Council of
The City of Waukegan
Waukegan, Illinois

Gentlemen:

When the North Shore Gas Company obtained authority to convert to natural gas and knew that the North Shore Coke and Chemical plant would be abandoned it decided to give to the City of Waukegan as a gesture of good will the land lying Easterly of the former North Shore Coke and Chemical Company property on the lake front, title to which land was formerly held by the City of Waukegan, said land being the land which was conveyed to North Shore Coke and Chemical Company by deed recorded in the Recorder's Office of Lake County, Illinois, as Document 415306, together with all accretions thereto and riparian rights.

This letter is to evidence the intention of this Company to carry into effect said promise, which conveyance is to be made with the understanding that the City of Waukegan is to dedicate a highway so as to provide access to the property now owned by the North Shore Gas Company lying Westerly of said strip and to provide ingress and egress for other property lying South of such strip of land.

You may rest assured that our Company will do everything possible to make this conveyance of land free from any mortgage encumbrances as soon as it can conveniently be done.

Yours very truly,

NORTH SHORE GAS COMPANY

C. J. [illegible]
Secretary-Treasurer

COPY

NORTH SHORE *Gas* COMPANY

Waukegan, Illinois

February 17, 1947

To the Mayor and City Council of
The City of Waukegan
Waukegan, Illinois

Gentlemen:

We have requested that the City of Waukegan pass an ordinance granting a franchise to the North Shore Gas Company for a period of twenty years and are informed that the City is about to pass such an ordinance. This letter is to evidence our agreement that in consideration of the granting of such franchise the undersigned will give to the City of Waukegan a credit against bills owing by the City of Waukegan for gas used for heating purposes or any other gas service at any municipal building of the City of Waukegan, which credit shall be One Thousand Dollars ($1,000.00) per year for each year of the franchise, said credit not to be cumulative.

This credit has been arrived at by mutual agreement between yourselves and ourselves and is to be considered a binding agreement by the City of Waukegan and the North Shore Gas Company the same as if said agreement had been included in the franchise itself.

If the City sees fit to accept this proposal by the passage of a franchise we will be glad to accept the same, with the understanding that this letter shall be a part of the entire agreement consisting of this letter, the franchise ordinance and the acceptance of the same.

Yours very truly,

NORTH SHORE GAS COMPANY

C. J. Mulholland,
Secretary-Treasurer

February 17, 1947

To the Mayor and City Council of
The City of Waukegan
Waukegan, Illinois

Gentlemen:

We have requested that the City of Waukegan pass an ordinance granting a franchise to the North Shore Gas Company for a period of twenty years and are informed that the city is about to pass such an ordinance. This letter is to evidence our agreement that in consideration of the granting of such franchise the undersigned will give to the City of Waukegan a credit against bills owing by the City of Waukegan for gas used for heating purposes or any other gas service at any municipal building of the City of Waukegan, which credit shall be One Thousand Dollars ($1,000.00) per year for each year of the franchise, said credit not to be cumulative.

This credit has been arrived at by mutual agreement between yourselves and ourselves and is to be considered a binding agreement by the City of Waukegan and the North Shore Gas Company the same as if said agreement had been included in the franchise itself.

If the city sees fit to accept this proposal by the passage of a franchise we will be glad to accept the same, with the understanding that this letter shall be a part of the entire agreement consisting of this letter, the franchise ordinance and the acceptance of the same.

Yours very truly,

NORTH SHORE GAS COMPANY

BY

February 10, 1947

To the Mayor and City Council
of the City of Waukegan
Waukegan, Illinois

Gentlemen:

We are informed that the City of Waukegan is about to pass an ordinance granting a franchise to the North Shore Gas Company for a period of twenty years.

This letter is to evidence our agreement that upon the granting of such franchise the undersigned will give to the City of Waukegan a credit against bills owing by the City of Waukegan for gas used for heating purposes or any other gas service at any municipal building of the City of Waukegan, which credit shall be $1,000.00 per year for each year of the franchise, which credit shall not be cumulative. This credit has been arrived at by mutual agreement between yourselves and ourselves and is to be considered a binding agreement by the City of Waukegan and the North Shore Gas Company the same as if the said agreement had been included in the franchise itself.

However, it is understood and agreed that the North Shore Gas Company has agreed to convey to the City of Waukegan all of the land lying Easterly of the North Shore Coke and Chemical Company property on the lake shore north of the harbor on Lake Michigan, title to which land was formerly held by the City of Waukegan, it being understood that the conveyance is to include all of the land formerly owned by the City of Waukegan and conveyed to North Shore Coke and Chemical Company by deed recorded in the Recorder's Office of Lake County, Illinois as Document No. 415306, together with all accretions thereto and all riparian rights in connection with said property, said conveyance to give the City of Waukegan good title free from any encumbrances, except easements and a public highway.

It is understood that when said conveyance of land is made a highway is to be established by the City of Waukegan over said land ~~in~~ a northerly and southerly direction so as to provide access to ~~other~~ property now belonging to North Shore Gas Company and a means of ingress and egress for other property lying South of said tract of land.

It is understood and agreed that when said conveyance has been made, then the foregoing agreement with regard to credits on bills is no longer to be in effect.

Yours very truly,

This letter was supplemented by 2 distinct letters, both dated February 17, 1947

Mulholland

Waukegan, Illinois,

February [illegible], 1947

To the Mayor and City Council
of the City of Waukegan
Waukegan, Illinois

Gentlemen:

We are informed that the City of Waukegan is about to pass an ordinance granting a franchise to the North Shore Gas Company for a period of twenty years.

This letter is to evidence our agreement that upon the granting of such franchise the undersigned will give to the City of Waukegan a credit against bills owing by the City of Waukegan for gas used for heating purposes or any other gas service at any municipal building of the City of Waukegan, which credit shall be $1,000.00 per year for each year of the franchise, which credit shall not be cumulative. This credit has been arrived at by mutual agreement between yourselves and ourselves and is to be considered a binding agreement by the City of Waukegan and the North Shore Gas Company the same as if the said agreement had been included in the franchise itself.

However, it is understood and agreed that the North Shore Gas Company has agreed to convey to the City of Waukegan all of the land lying Easterly of the North Shore Coke and Chemical Company property on the lake shore north of the harbor on Lake Michigan, title to which land was formerly held by the City of Waukegan, it being understood that the conveyance is to include all of the land formerly owned by the City of Waukegan and conveyed to North Shore Coke and Chemical Company by deed recorded in the Recorder's Office of Lake County, Illinois, as Document No. 415306, together with all accretions thereto and all riparian rights in connection with said property, said conveyance to give the City of Waukegan good title free from any encumbrances, except easements and a public highway.

It is understood that when said conveyance of land is made a highway is to be established by the City of Waukegan over said land in a northerly and southerly direction so as to provide access to other property now belonging to North Shore Gas Company and a means of ingress and egress for other property lying South of said tract of land.

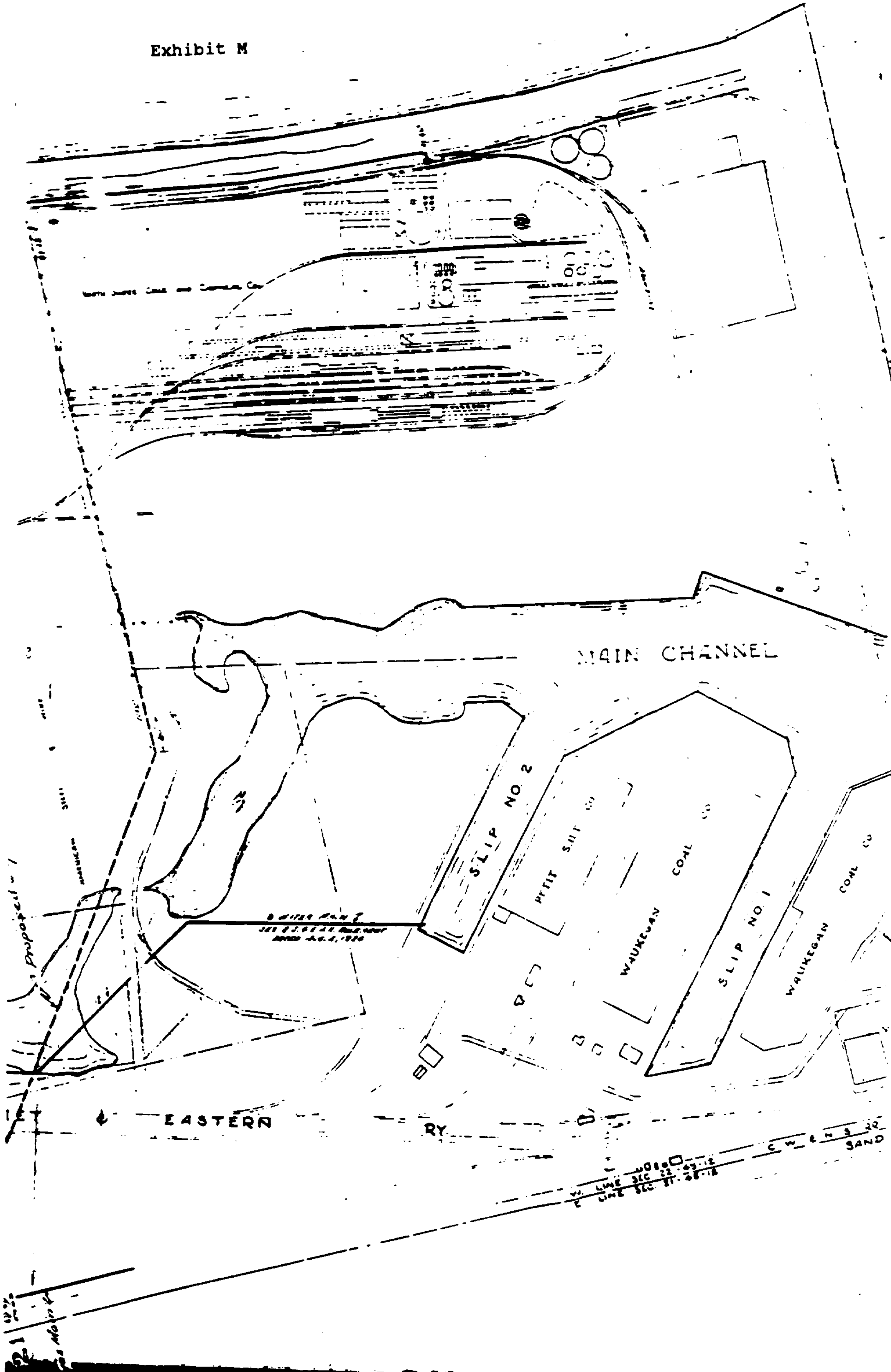
It is understood and agreed that when said conveyance has been made, then the foregoing agreement with regard to credits on bills is no longer to be in effect.

Yours very truly,

C. J. Mulholland,
Sec'y.-Treasurer

CJM:c

Exhibit M



[redacted]

DATED MARCH 23, 1927 - REVISED 11-9-46

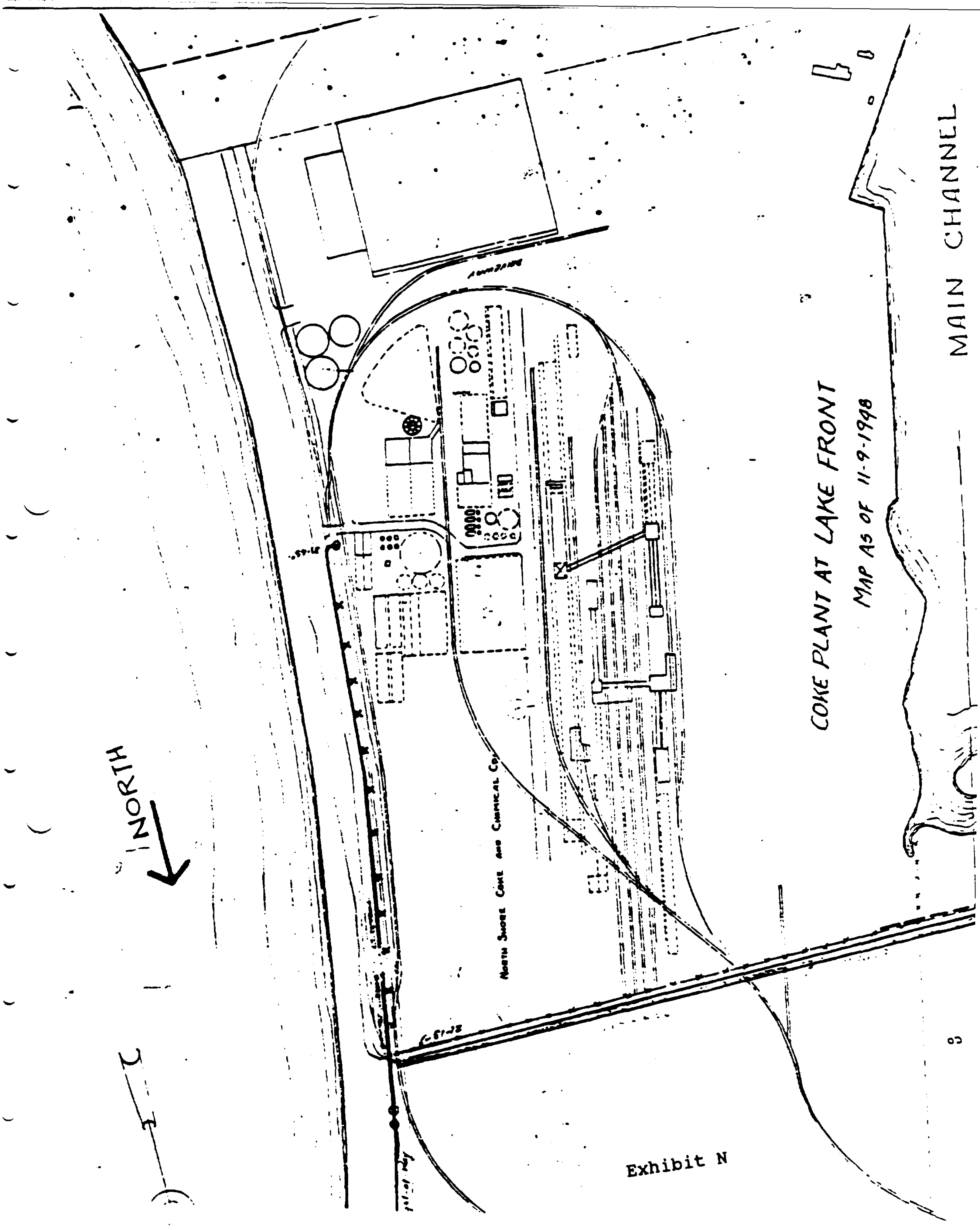
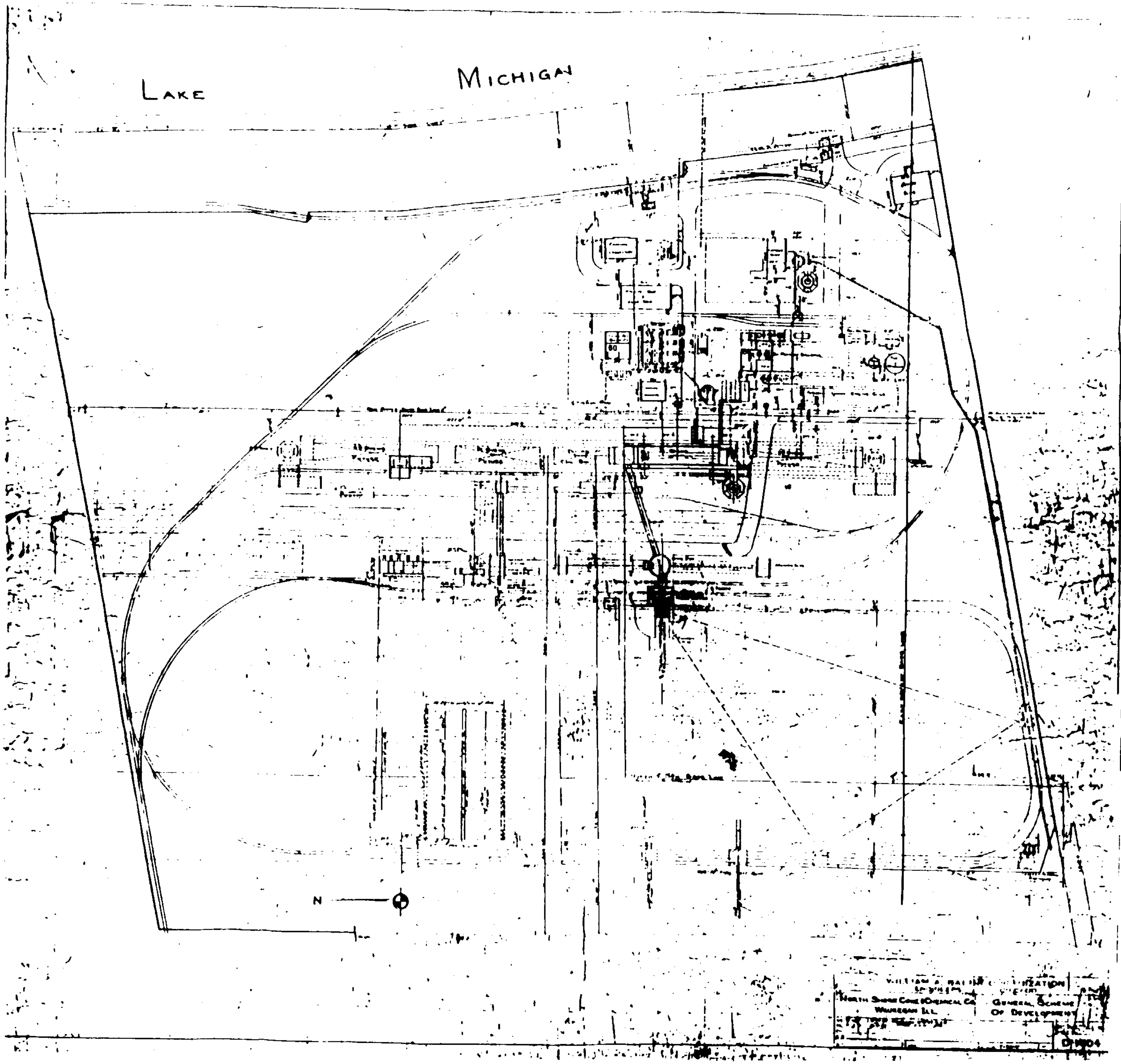

COKE PLANT AT LAKE FRONT
MAP AS OF 11-9-1998
MAIN CHANNEL
NORTH
North Shore Coke and Chemical Co.

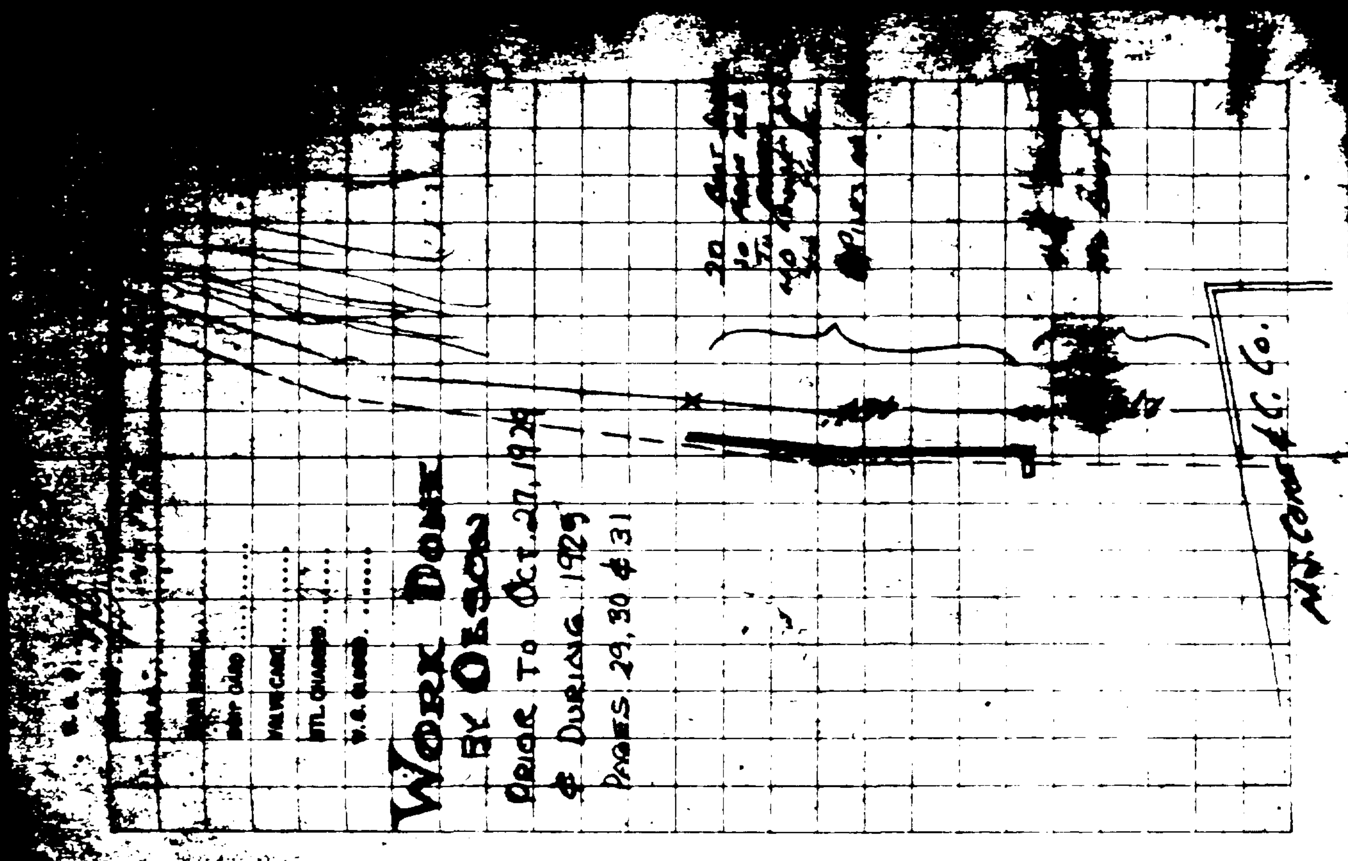
Exhibit N

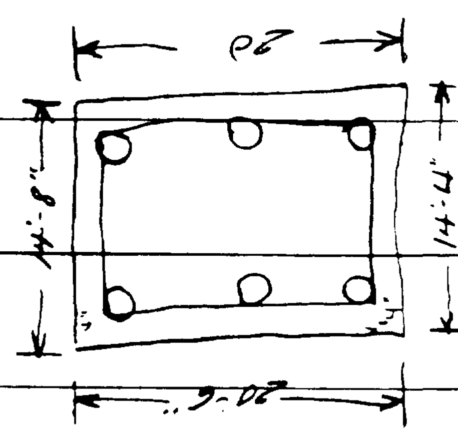
Exhibit o



LAKE MICHIGAN
N
North Shore Coke & Chemical Co.
Waukegan Ill.
General Scheme
Of Development

Exhibit P





Field Book 37

[illegible]

2 [illegible]

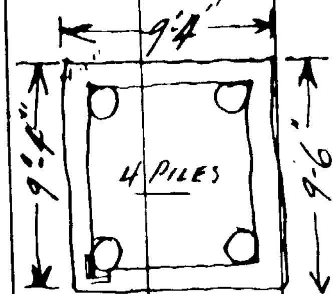
X [illegible]

[illegible]

[illegible]

[illegible]

SHEATING 8" LESS



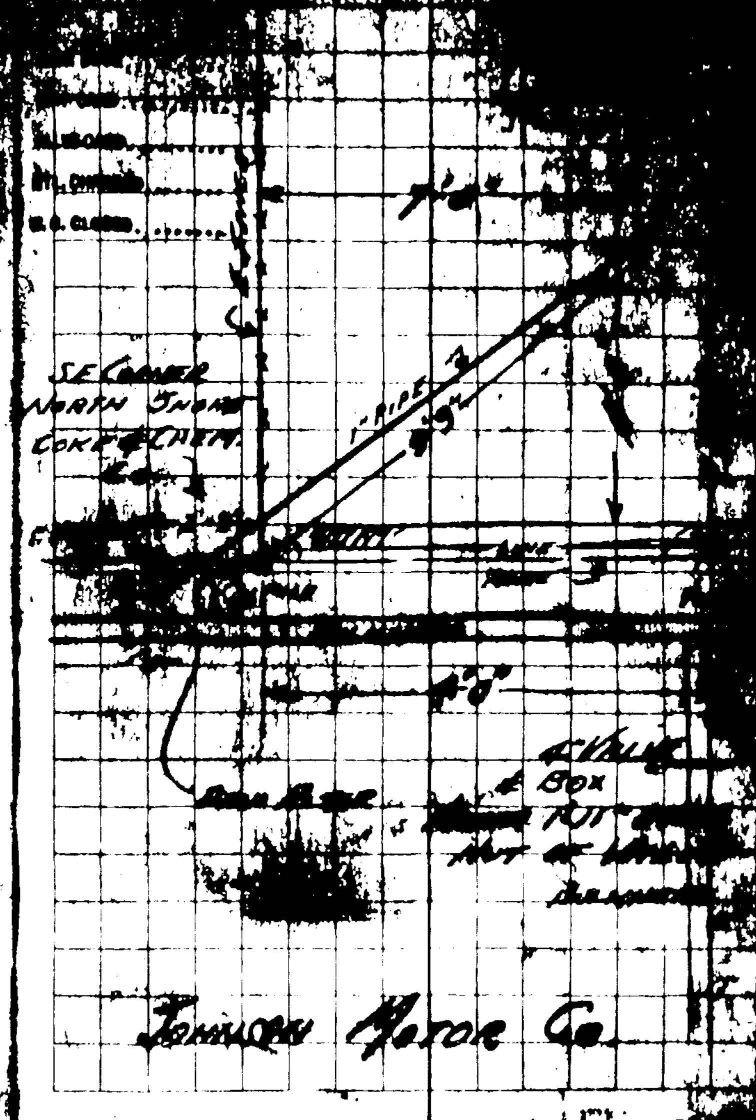
9'4"
9'4
9'6
9'6
20
11
37'-8"
2'8
35-0

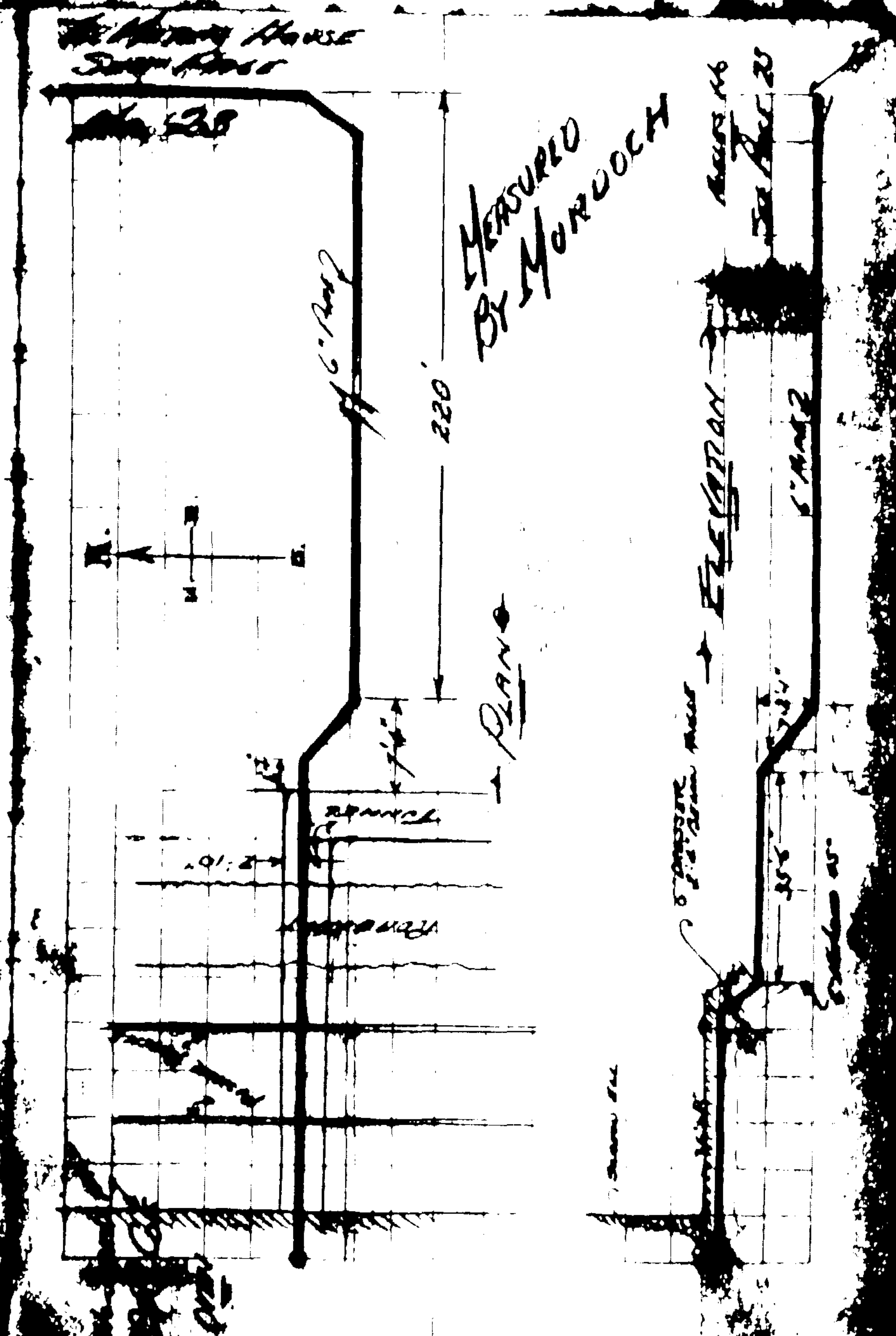
745-6
728-0
464-0
228-0
2538
35
66-4
2639 10" BULK HEAD

81
138
427
10 DRIP

ROOF JACKS

45-6


SE CORNER
NORTH SHORE
COKE & CHEM.
PIPE
& BOX
Motor Co.



Field Book 52

W. O. # ....

INDEXED ....

ATLAS ....

MAIN BOOK ....

DRIP CARD ....

VALVE CARD ....

MTL. CHARGED ....

W. O. CLOSED ....

6" Steel Pipe

[illegible] Cast Iron To Meter House

Measured By [illegible]

Field Book 60

W. O. # 3459
INDEXED [illegible]
AS [illegible]
BOOK [illegible]

Johnson Motor job →

WORK ORDER NO. 3459

(Pages 9-10-11-12-13)

Pipe shown in red laid on this work order.

Work started — Sept. 18, 1944
Work completed Oct. 18, 1944

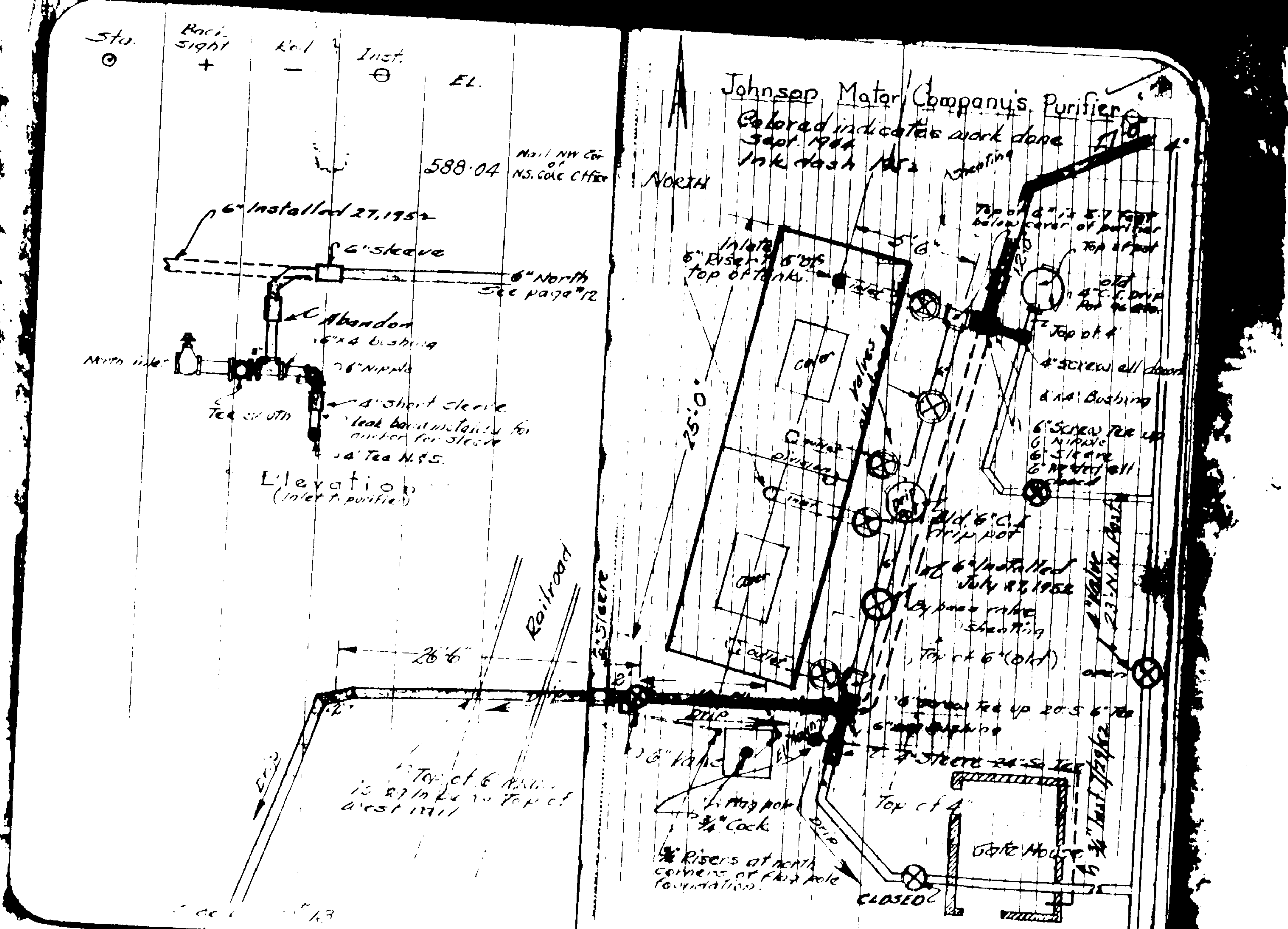
6" Mill coated, welded joint steel pipe used thru out.
Sleeves are style 40 Dresser Co.

Drip pots are of 16" steel pipe welded
Main drip has 4" inlet
Service " has 1¼" inlet
Taps at flag pole are 3/16" with ¾" risers east & west of valve.

– NOTE: –
6" manifold on purifier was checked it was found clean. 9-29-44

560' of 6" P.E. coated steel welded pipe ~~was~~ laid.

Sheeting at north inlet and at south outlet was cut off at end and left in ground.



Sta.
Back sight
+
Rod
−
Inst.
EL.
588·04
Nail NW Cor of N.S. Coke Office
6" Installed 27, 1952
6" sleeve
6" North
See page 12
Abandon
16"x4" bushing
6" Nipple
North inlet
Tee south
4" short sleeve
4" Tee N.S.
Elevation
(inlet to purifier)
Railroad
26'6"
Drip
Johnson Motor Company's Purifier
Colored indicates work done Sept. 1944
Ink dash 1952
NORTH
Inlets
6" Risers 6" of top of tanks
25'0"
5'6"
Top of pot
4" Screw ell down
6" Screw Tee up
6" Nipple
6" Sleeve
Old 6" C.I. drip pot
6" Installed July 27, 1952
Bypass valve
Sheeting
Top of 6" (old)
open
Top of 4"
Gate House
CLOSED
Drip
Flag pole
3/4" Cock
Risers at north corners of flag pole foundation.
6" valve

⊙	Back Sight +	Rod −	Inst. ⊕	EL.
0+00	Sept. 25th	2.28	590.32	588.04
			585.27 / 590.29 / 4.99	
	10.15		590.32	580.17
	11.90		590.32	578.42
	12.35		590.32	577.97
	5.05		590.32	585.27
	10.03		590.32	580.29
	7.28		590.32	583.06
	6.45		590.32	583.87
	6.50		590.32	583.82
	7.50		590.32	582.82
	8.50		590.32	581.82
Check 10/12/41	10.34	2.46	590.50	580.18

6" Johnson Motor Line 11

9.29.44

Nail NW. Corner of N.S. Coke Office El. 588.04

16" Main at E.J. & E. Gate (Top)

Top of 6" main at valve

Top of 6" main

Top of 6" main

Top of 6" main going down

Top of 6" Tee into purifier

Top of 4" Drip pot

Top of 4" into drip pot

Top of purifier north end

Top of 6" Tee into purifier

Top of 6" west across R.R. at ell down

Top of 6" SW. to avoid Johnson's Top of S. Ell down

Top of 6" Nipple in W. side of valve

Top of 6" South of ell south

Top of 6" 30' N.E. R.R. over main

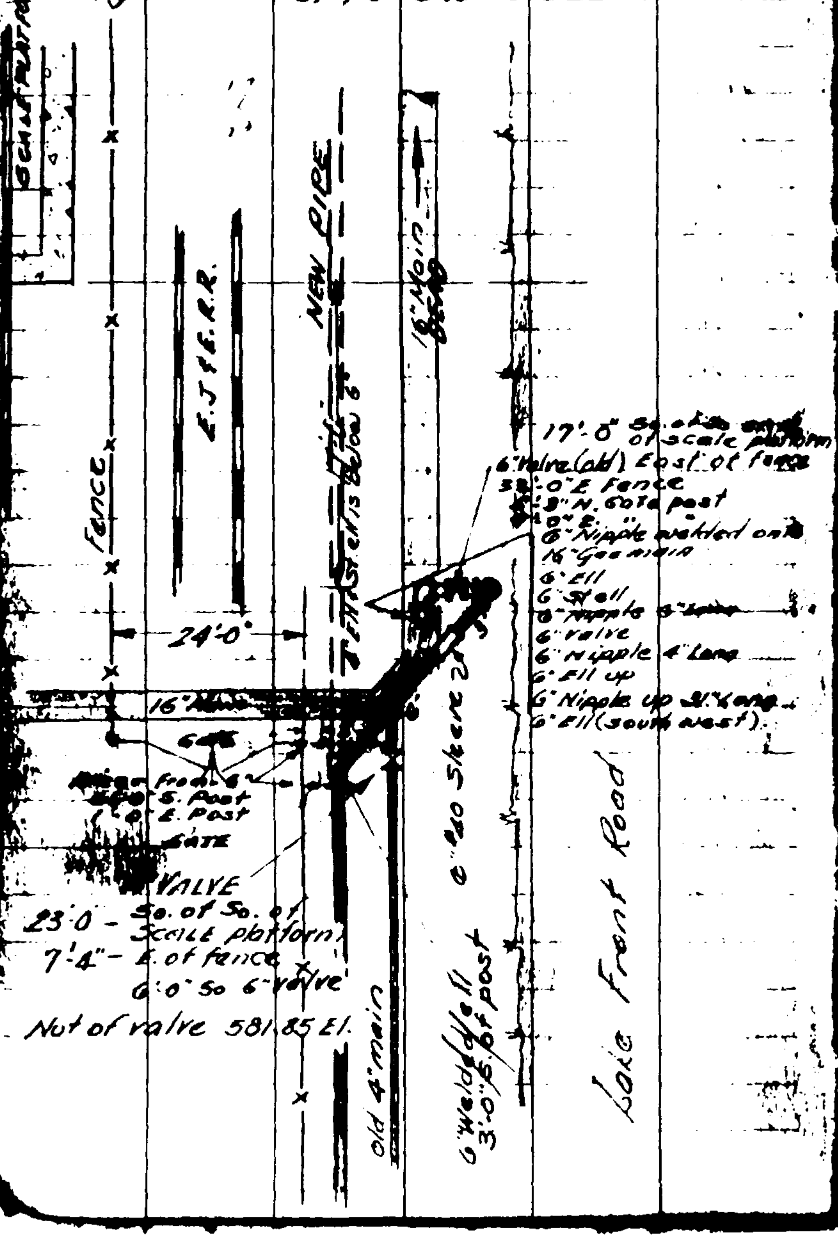
Top of 6" 25' North of W. post of Mill Track gate

Top of 6" at W. E.J.&E. R.R. gate NW. post

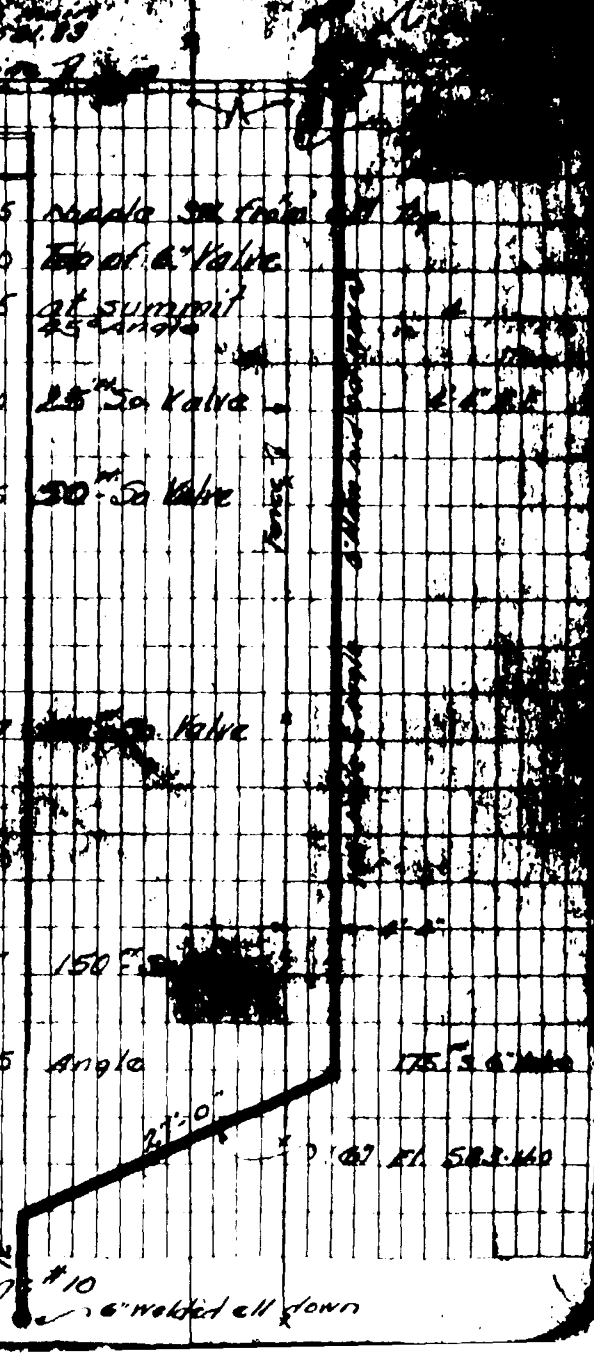
Top of 6" at Johnsons wall

Top of 6" Tee inlet of purifier check on above

	Back Sight	Rod	Inst	EL.	
		2.46	590.50	588.04	Nail NW. Corn office foundation



Back Sight	El.	
6.45	584.05	Nipple from ell top
8.10	582.40	Top of 6" Valve
6.05	584.45	at summit 45° Angle
6.10	584.40	25' So. Valve
6.25	584.25	50' So. Valve
6.58	583.92	Valve
6.85	583.65	150'
6.95	583.55	Angle

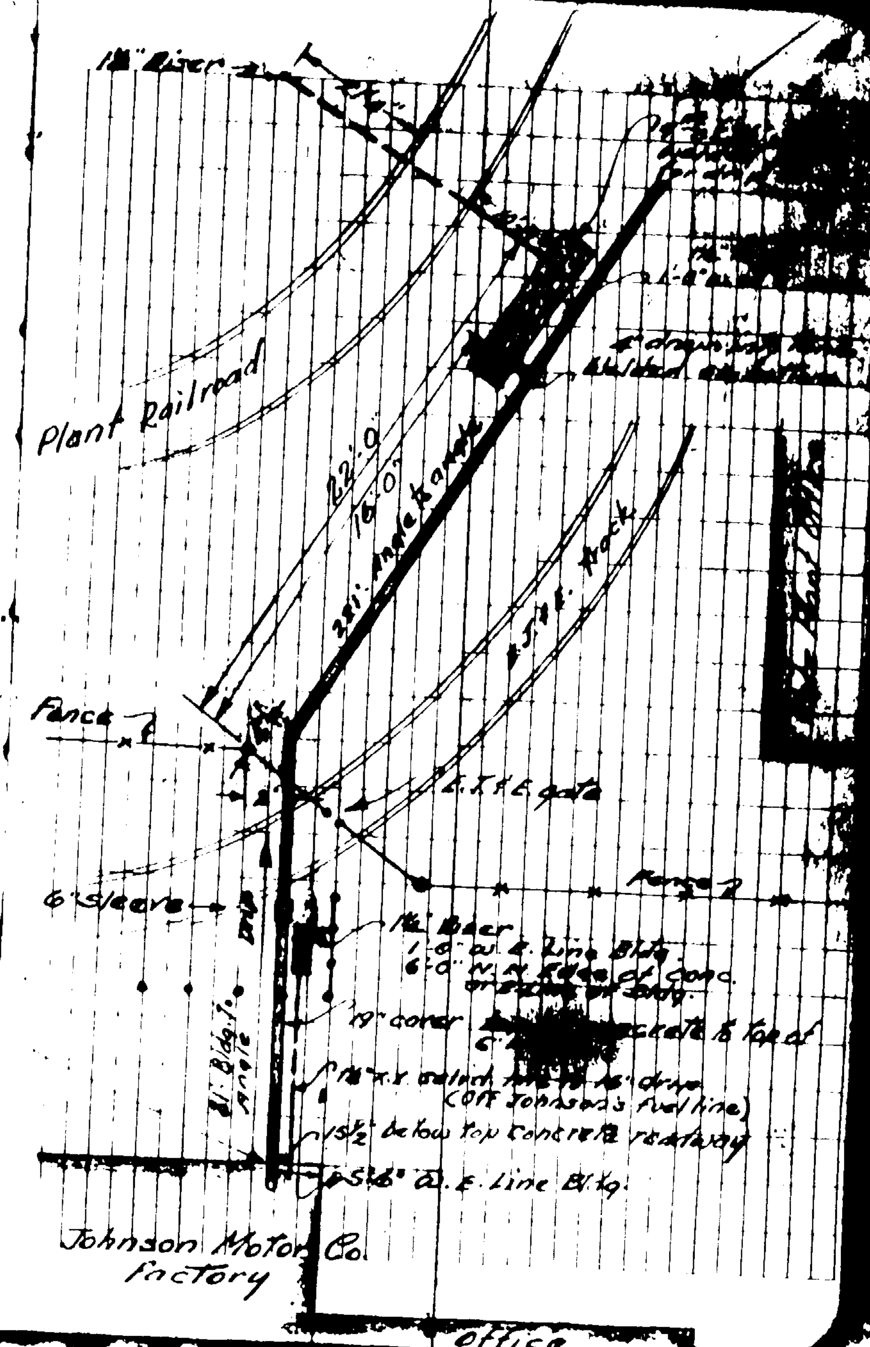


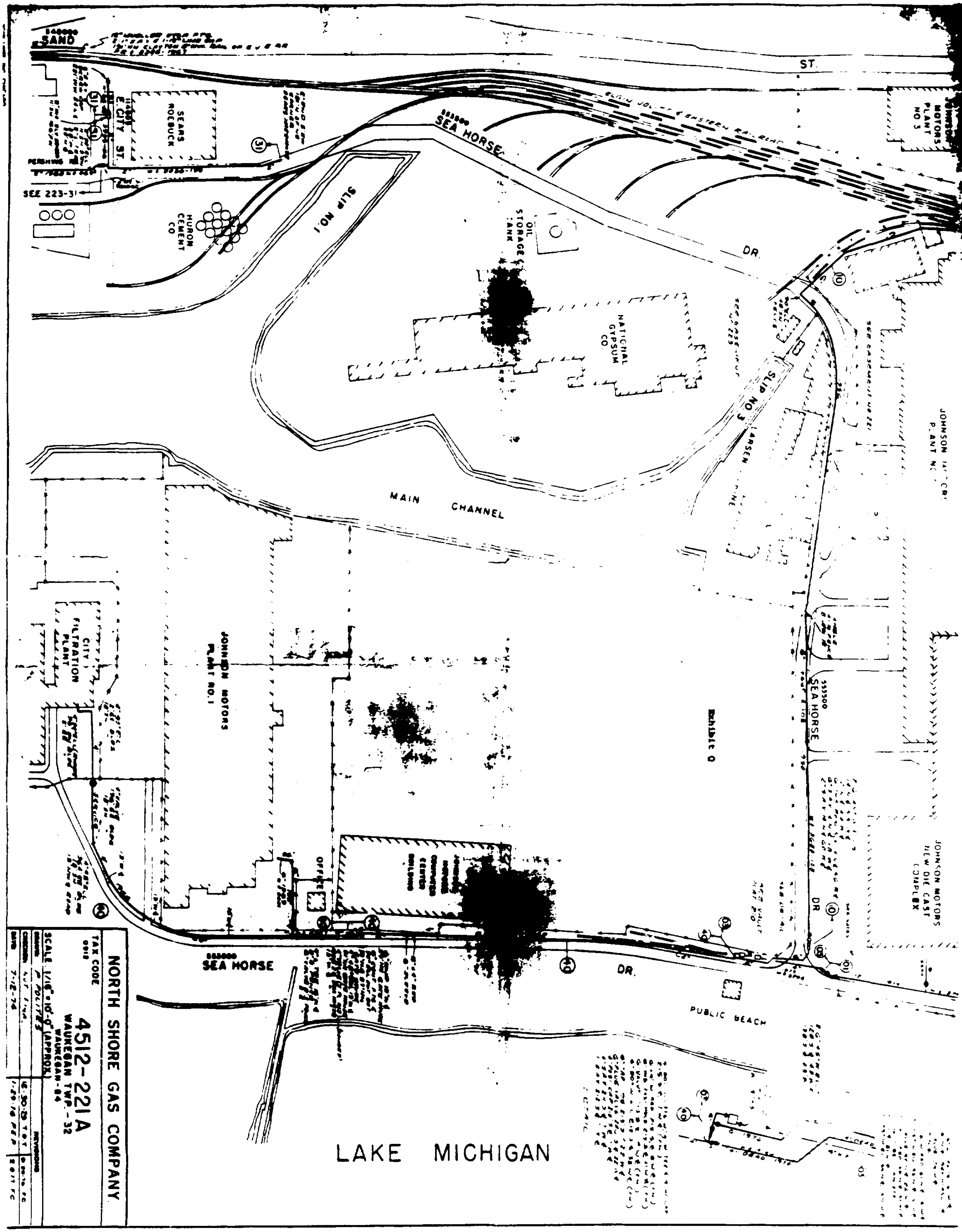
See page #10

16" x 30" St

Riser -

Top of 6" main 59" below water table




SAND
ST.
SEA HORSE
ELGIN JOLIET & EASTERN RAILROAD
SEARS ROEBUCK
E. CITY ST.
PERSHING
SEE 223-31
HURON CEMENT CO
SLIP NO. 1
OIL STORAGE TANK
DR.
NATIONAL GYPSUM CO.
SLIP NO. 3
LARSEN
JOHNSON MOTORS PLANT NO. 3
JOHNSON MOTORS PLANT NO. 1
MAIN CHANNEL
CITY FILTRATION PLANT
Exhibit Q
SEA HORSE
JOHNSON MOTORS NEW DIE CAST COMPLEX
OFFICE
SEA HORSE
DR.
PUBLIC BEACH
LAKE MICHIGAN
NORTH SHORE GAS COMPANY
TAX CODE
4512-221A
WAUKEGAN TWP.-32
WAUKEGAN-84
SCALE 1/16"=10'-0" (APPROX)
REVISIONS

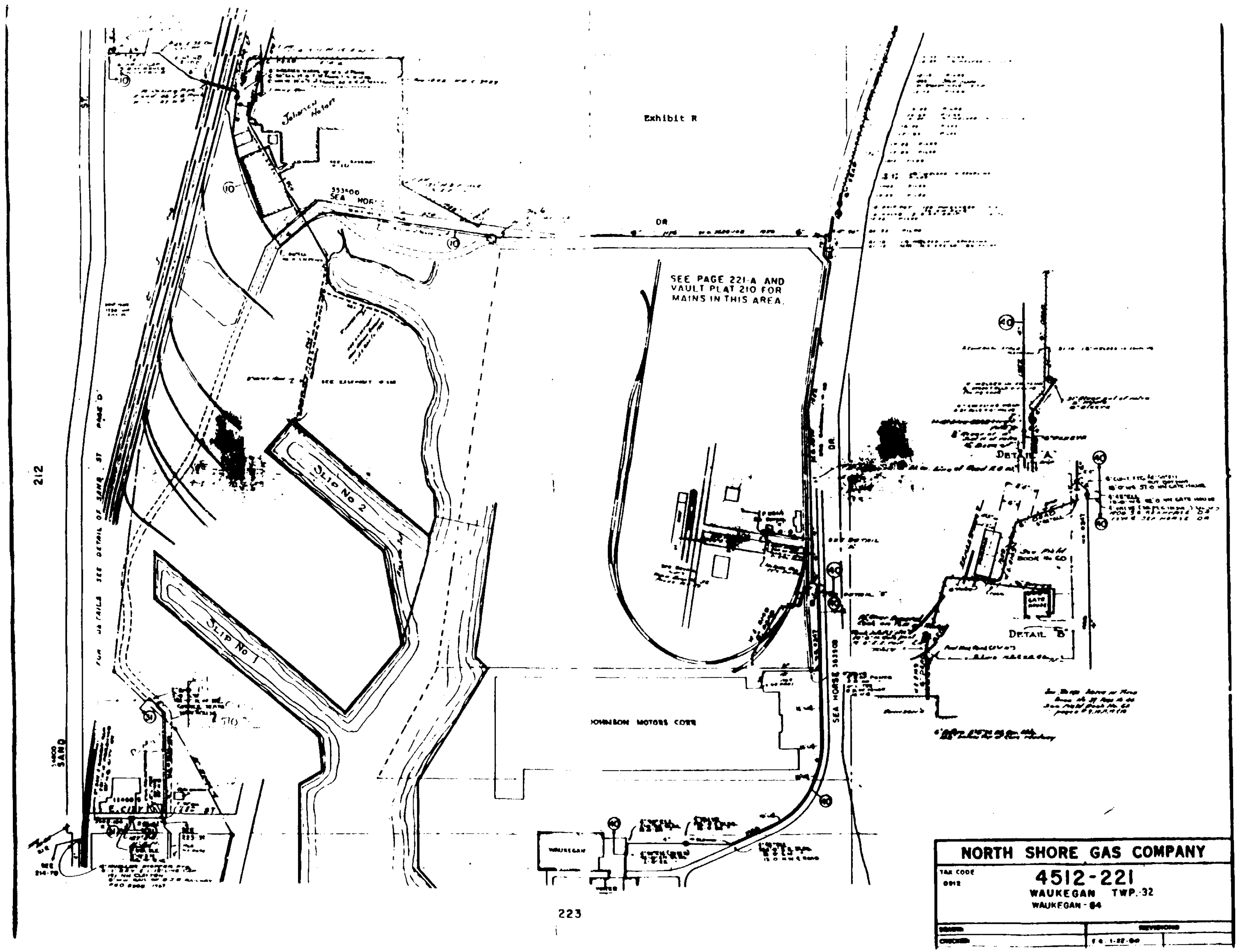


Exhibit R
SEE PAGE 221-A AND
VAULT PLAT 210 FOR
MAINS IN THIS AREA.
SEA HORSE DR.
SLIP No 2
SLIP No 1
JOHNSON MOTORS CORP
DETAIL "A"
DETAIL "B"
212
223
NORTH SHORE GAS COMPANY
4512-221
WAUKEGAN TWP. 32
WAUKEGAN - 84

DUFF AND PHELPS

W. H. DUFF
ALFRED L. BURKE
P. P. STATHAS
JAMES H. CLARK

EVAN L. AUSMAN
C. S. NASON

208 SOUTH LA SALLE STREET
CHICAGO

Exhibit S

-REPORT-

NORTH SHORE GAS COMPANY

AND

NORTH SHORE COKE & CHEMICAL COMPANY

<u>NORTH SHORE GAS COMPANY</u>

AND

<u>NORTH SHORE COKE & CHEMICAL COMPANY</u>

TABLE OF CONTENTS

August 1, 1940

NORTH SHORE GAS COMPANY
AND
NORTH SHORE COKE & CHEMICAL COMPANY

INTRODUCTION

We have been retained to make a general study of the operations and other related factors of the North Shore Gas Company, with particular reference to the problems presented by the early maturity of the presently outstanding debt. Inasmuch as North Shore Gas Company purchases over 80 per cent of its gas requirements from the affiliated North Shore Coke & Chemical Company, and consequently the operations of the two companies are interdependent, it also became necessary, in the present study, to analyze the operations of the latter company.

The results of our investigation are presented under the following headings. For the sake of brevity, the North Shore Gas Company is referred to in the following text as the Gas Company, while North Shore Coke & Chemical Company is referred to as the Coke Company.

HISTORY

The Gas Company was originally incorporated under the laws of the State of Illinois on July 13, 1908, under the name of Winnetka Gas Company. About July 29, 1908, Winnetka Gas Company acquired by merger all of the properties and business and assumed all of the liabilities of another Illinois corporation by the name of North Shore Gas Company. Immediately after this merger the name was changed from Winnetka Gas Company to North Shore Consolidated Gas Company, and in 1912 the name was changed to North Shore Gas Company, the present name.

Some of the constituent properties date back to 1898 and represent the outgrowth of activity on the part of a small group of individuals who started construction or purchase of manufactured gas properties serving communities in Lake County and in the northern portion of Cook County in the State of Illinois. The first property acquired was in Waukegan, Illinois, where a coal gas plant was placed in operation in 1898. In 1901, the same interests obtained franchises and extended gas service to Lake Bluff, Lake Forest, Highwood and Highland Park, and the facilities were later expanded to serve North Chicago and Glencoe in 1904, and Winnetka in 1908. In 1909, operations were expanded to cover service to the towns of Deerfield and

Libertyville, and in 1910, gas service was extended to Mundelein.

It appears that during the winter of 1916 - 1917 the properties experienced serious operating problems which resulted in the interruption of service for a short time, and, as a result, the interests then in control of the properties retained Mr. William A. Baehr, a well-known consulting engineer, to solve the operating problems and to manage the properties. Mr. Baehr was retained in May, 1917, and the property has been continuously under Baehr management since that time.

After an intensive development of the properties, Mr. Baehr and his associates started to acquire control of the Gas Company for North Continent Utilities Corporation, which was organized in November, 1922, as a holding company by the Baehr interests. Control was initially obtained through Chicago Suburban Gas Company, and full control of the Gas Company was acquired in 1927. The Chicago Suburban Gas Company was dissolved in December, 1937, and North Continent Utilities Corporation has been in direct control of the Gas Company since that time through ownership of all of the outstanding common stock.

Up to 1925, the Gas Company's operating territory was confined within a relatively narrow strip along the lake shore and extending from Winnetka at the south end, to the northern limits of the City of Waukegan at the north end. In 1925, however, the company started an expansion program whereby the transmission system was extended beyond Waukegan to the Illinois-Wisconsin state line in that year, and further extensions were made west of Waukegan during 1925 - 1930, thereby extending service to Grays Lake and other communities in the western section of the present territory.

In connection with this expansion program and in order to provide an adequate source of supply for the Gas Company's requirements, the Baehr interests organized the North Shore Coke & Chemical Company which was incorporated under the laws of the State of Delaware on January 17, 1927. Shortly after its incorporation, the Coke Company constructed a coke oven plant at Waukegan. The plant was completed in the middle of 1928, and has since been supplying, under contract, the bulk of the gas requirements of the Gas Company. As previously stated, the Coke Company is an affiliate of the Gas Company, and is controlled by North Continent Utilities Corporation.

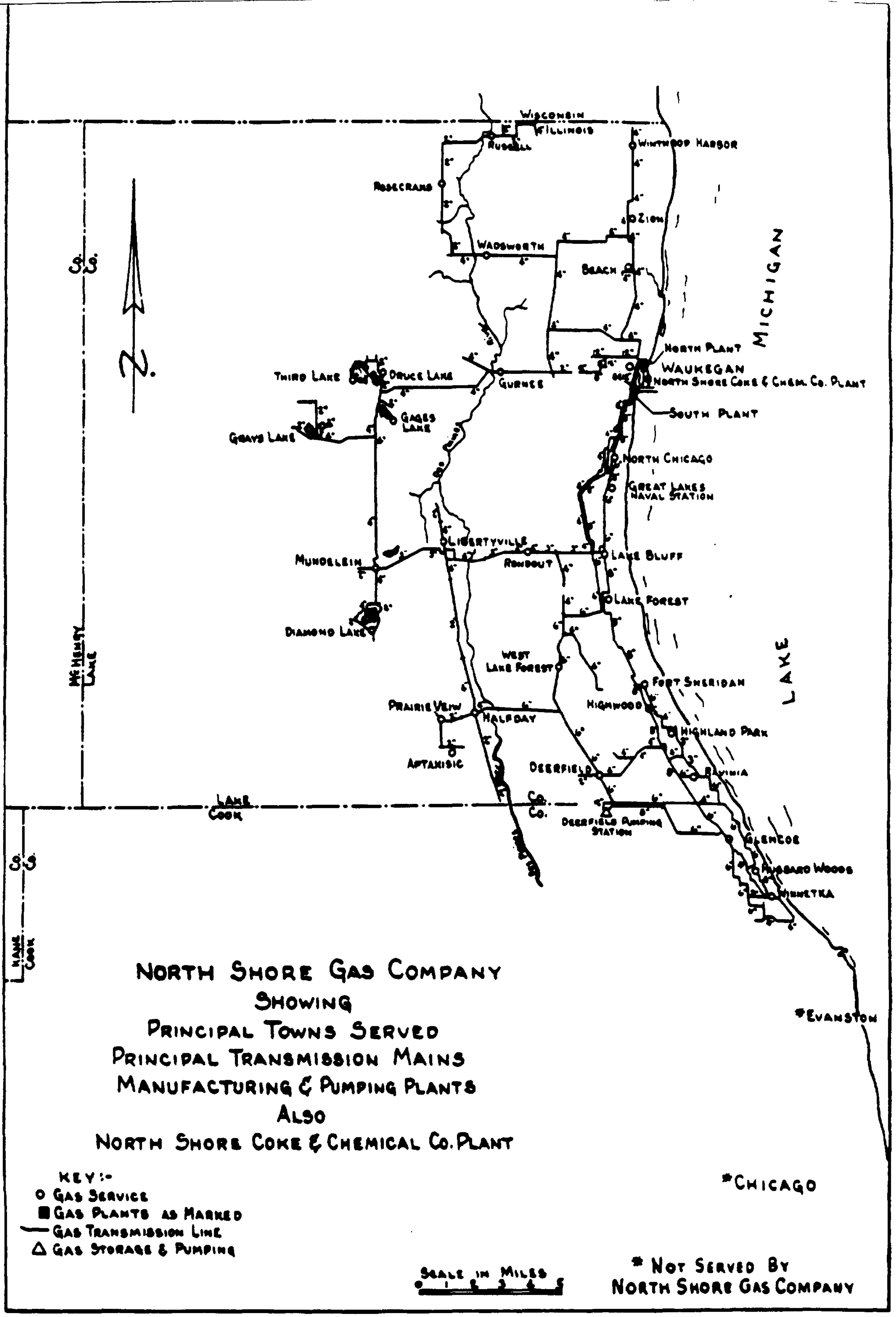
BUSINESS AND TERRITORY

The North Shore Gas Company is engaged in the production, purchase, distribution and sale of manufactured gas in the territory along the North Shore region suburban to Chicago. The service area extends from the south limits of Winnetka, Illinois, north to the Wisconsin state line, a distance of about 30 miles. In the other direction, the territory is rather narrow and at its widest point extends west as far as Grays Lake, a distance of about 12 miles from Lake Michigan. The territory as a whole comprises an area of about 270 square miles with an estimated population in excess of 115,000. As of March 31, 1940, the company had 27,102 active meters in service. The territory served, together with the general layout of the transmission system, is shown on the attached map.

The Company's service area includes 30 communities, as well as the Great Lakes Naval Training Station, with a present personnel of about 3,500, Fort Sheridan, a U. S. Army Post, with present personnel of 3,200, and a large Veterans' Hospital. The principal communities served, together with pertinent population data covering the period 1920 - 1940, are listed below:

Community	Population: Preliminary Census Figures 1940	Population: Census Figures 1930	Population: Census Figures 1920	Per Cent Increase: 1930 over 1920	Per Cent Increase: 1940 over 1930
Waukegan	34,111	33,499	19,226	74.2	1.5
Highland Park	14,332	12,203	6,167	97.9	17.1
Winnetka	11,712	12,166	6,694	81.7	-3.0
North Chicago	8,403	8,466	5,839	45.3	-0.5
Lake Forest	6,510	6,554	3,657	79.4	-0.5
Glencoe	6,758	6,295	3,381	86.1	7.5
Zion	6,533	5,991	5,580	7.5	9.0
Libertyville	3,918	3,791	2,125	78.4	3.5
Highwood	3,700	3,590	1,446	148.2	3.0
Deerfield	2,278	1,852	610	203.0	23.0
Lake Bluff	1,715	1,452	819	77.5	18.5
Grays Lake	1,179	1,120	736	52.2	5.0
Mundelein	1,325	1,011	420	141.0	32.0
Total	102,474	97,990	56,700	72.4	5.0

The above figures show relatively phenomenal gains in population between 1920 and 1930 for the communities listed above, with a composite population growth of 72-1/2 per cent during that decade for the group as a whole. This growth was accompanied by a substantial increase in the number of gas customers served by the company, with yearly gains of close to 10 per cent in the early 1920's. For example, in contrast with 19,913 meters served at the end of 1926, this number increased to a peak of 25,150 meters by the end of 1930, a gain of 26.3 per cent during that period. It should be noted, however, that a part of the customer gain experienced during 1920 - 1930 was due to line extensions into communities not previously served with gas as already noted, but even after taking this factor into account, it can be said that the customer growth in the territory was much superior to that experienced by a number of other companies which we have analyzed.


NORTH SHORE GAS COMPANY
SHOWING
PRINCIPAL TOWNS SERVED
PRINCIPAL TRANSMISSION MAINS
MANUFACTURING & PUMPING PLANTS
ALSO
NORTH SHORE COKE & CHEMICAL CO. PLANT
KEY:-
o GAS SERVICE
■ GAS PLANTS AS MARKED
— GAS TRANSMISSION LINE
△ GAS STORAGE & PUMPING
SCALE IN MILES
0 1 2 3 4 5
* NOT SERVED BY
NORTH SHORE GAS COMPANY
WISCONSIN
ILLINOIS
McHENRY
LAKE
CO.
CO.
LAKE
COOK
CO.
CO.
KANE
COOK
CO.
CO.
N.
LAKE
MICHIGAN
RUSSELL
WINTHROP HARBOR
ROSECRANS
ZION
WADSWORTH
BEACH
NORTH PLANT
WAUKEGAN
NORTH SHORE COKE & CHEM. CO. PLANT
SOUTH PLANT
THIRD LAKE
DRUCE LAKE
GURNEE
GAGES
LAKE
GRAYS LAKE
NORTH CHICAGO
GREAT LAKES
NAVAL STATION
LIBERTYVILLE
MUNDELEIN
RONDOUT
LAKE BLUFF
LAKE FOREST
DIAMOND LAKE
WEST
LAKE FOREST
FORT SHERIDAN
PRAIRIE VIEW
HALFDAY
HIGHWOOD
HIGHLAND PARK
APTAKISIC
DEERFIELD
RAVINIA
DEERFIELD PUMPING
STATION
GLENCOE
HUBBARD WOODS
WINNETKA
*EVANSTON
*CHICAGO

The subsequent business depression, however, interrupted the growth of the territory for a number of years and new building construction dropped sharply. In addition, it appears that, owing to the shut-down or partial operation of industries in the Waukegan industrial area during the depression, there was some doubling up of families, and it also appears that some of the families in the high cost residential suburbs in the southern portion of the company's territory moved into less expensive homes outside of the service area, although other families later moved into the vacant homes. As a result, the company lost some customers during the 1930 - 1933 depression. Between 1930 and 1933, the active meters in service showed a decline of 1,437, or 5.7 per cent. This, however, was not as large a decline as that experienced by other gas companies serving heavy industrial sections. It is further interesting to note that the downward trend of the number of active meters in service was reversed subsequent to 1933 and, as a result, the number of meters showed an increase from a depression low of 23,713 reached in 1933, to 27,107 as of the end of 1939, an increase of 14.3 per cent. Thus the 1939 year-end figure exceeded the 1930 predepression peak by 1,957 meters or 7.8 percent.

During the past several years the growth in the territory was resumed in many of the communities served. Preliminary census figures for 1940 for the larger communities indicate an increase of about 5 per cent over 1930 with the percentage increases for several of the communities having amounted to between 15 per cent and 32 per cent. There was, however, a small loss in population in Winnetka, Lake Forest and North Chicago. It is probable that if census figures on the subject were available, the increase in population during the last two or three years for the territory as a whole, as well as for most of the individual communities served, would have been larger than for the entire period 1930 - 1940. The resumption of the growth in most portions of the territory will be evident from the building permit figures for the principal communities over a period of years presented in the tabulation on the following page.

These figures include remodeling permits as well as commercial oonstruction. In the present study, we are particularly interested in the number of new homes built in the territory, since this is a factor of primary importance from the standpoint of the availability of new customers to the company's lines. Figures on new home building permits are available to us only for the years 1938 and 1939 and for the first three months of 1940. An examination of these figures shows that for the eight larger communities served by the company, there were 258 such permits in 1939 as against 174 in 1938, an increase of 48 per cent. The dollar value in 1939 was $2,758,656, and

BUILDING PERMITS FOR LARGER COMMUNITIES SERVED BY NORTH SHORE GAS COMPANY

	1930		1933		1936		1937		1938		1939	
	No.	Value $	No.	Value $	No.	Value $	No.	Value $	No.	Value $	No.	Value $
North Chicago	*	*	*	*	89	123,350	85	91,835	47	34,197	77	100,951
Waukegan	85	670,000	101	110,175	520	629,120	532	706,272	310	644,877	375	498,497
Lake Forest	16	648,976	8	105,466	21	437,466	14	260,449	12	299,817	29	456,421
Highland Park	223	300,865	113	237,719	240	1,770,817	224	2,009,464	156	882,967	182	1,103,500
Highwood	70	113,975	16	31,950	13	16,700	28	43,750	31	31,850	30	63,360
Glencoe	84	659,680	39	78,926	77	399,124	65	360,375	53	712,979	61	412,553
Winnetka	113	1,280,345	58	394,425	161	1,208,135	132	972,370	103	645,690	125	1,232,710
Libertyville	20	129,565	6	21,000	9	113,809	2	4,000	5	67,500	10	51,700
Total	611	3,803,406	341	979,661	1,130	4,698,521	1,082	4,448,515	717	3,319,877	889	3,919,692

* - Not Available

in 1938, $2,017,457, an increase of about $740,000 or almost 37 per cent. During the first three months of 1940, there were 33 new home building permits involving an aggregate value of $301,121. An analysis of similar figures for all of the suburbs in the Chicago area discloses that the average cost per new home built in the territory served by the company is considerably higher than that obtained in the other suburban areas. The average cost per home in the company's territory in 1938 amounted to about $11,600 and in 1939 to about $10,700 as compared with an average for all of the other suburbs of about $6,720 in 1938 and $6,250 in 1939. It is further found that the average for the company's territory was diluted by the cheaper type of homes built in the industrial communities such as Waukegan and North Chicago where the average cost was $4,875 in 1938 and $4,650 in 1939. If these two communities are excluded, and only Glencoe, Winnetka, Highland Park, Lake Forest, Lake Bluff and Libertyville are considered, we find that the average cost for 142 new homes which were built in these communities in 1938 averaged about $13,100, while the corresponding figure for about 195 homes built in 1939 was $12,600. These comparisons afford a good indication of the character of new homes in the respective areas, and it is readily apparent that the residential suburbs served by the company are still attracting high income residents.

We also made an analysis of the new homes built within reach of the company's gas mains during the past three years. The number of such new homes actually completed amounted to 243 in 1937, 179 in 1938, and 242 in 1939. During the first three months of 1940, there were 53 such new homes completed, and an additional 109 homes were under construction. In this connection it should be remembered that the extremely cold weather experienced in the first two months of 1940 greatly retarded building construction, and we understand that the new home building permits issued in April for the Chicago suburban area as a whole greatly exceeded those for any previous month since 1936.

It is significant to note that during recent years there has been a general movement of population from the congested Chicago area into the suburban areas, particularly to the North Shore suburbs. This movement is likely to continue in the future and may well be accelerated, particularly under normal economic conditions. The North Shore suburbs provide more attractive living conditions as the territory is not congested and temperatures during the hot summer months are from five to ten degrees cooler than those in towns farther away from the lake. Other inducements offered by the North Shore suburbs are better school facilities, easier access to bathing beaches and to other recreational facilities, and lower property taxes. In view of these favorable factors, and in the light of the trend already being experienced, it is logical to conclude that the territory served by the company will enjoy very appreciable population growth as time goes on.

As a matter of fact, there are comparatively few vacant houses in these high grade residential suburbs at the present time. Even in the City of Waukegan, notwithstanding its industrial background, a recent survey showed very few vacancies. For example, out of a total of 4912 residences, only 42 were vacant as of June 1, 1940, and there were only 68 apartments vacant out of a total of 4374. Store and office buildings also show a relatively high occupancy.

Before discussing the economic background of the company's service area, it may be of interest to note that for operating purposes the territory is divided into five districts. The relative importance of each district will be evident from the following tabulation, which gives a division of the company's 1939 sales by districts in terms of revenue and M.c.f.

	Revenues from Gas Sales		Gas Sales - M.c.f.	
	Amount	% of Total	Amount	% of Total
District				
Waukegan	$ 462,972	31.6	$ 428,022	27.6
Lake Forest	143,523	9.9	136,578	8.8
Highland Park	343,688	23.5	394,794	25.6
Winnetka	419,540	28.8	509,622	33.0
Libertyville	90,243	6.2	77,401	5.0
Total	$1,459,966	100.0	$1,546,417	100.0

The Waukegan district, which accounted for 31.6 per cent of the gross gas revenue and for 27.6 per cent of the M.c.f. sales in 1939, includes the cities of Waukegan, North Chicago, Zion, and all other communities north of Waukegan shown on the attached map of the territory. The economic background of this district is primarily industrial, with most of the industrial plants located along the shoreline and railroad tracks in Waukegan, North Chicago and vicinity, with some industry in Zion. This industrial area enjoys a considerable amount of diversified miscellaneous manufacturing, and the principal industries include iron and steel products, machinery, paper and printing, chemicals, pharmaceuticals, metals and metal products, fencing and wire products, clothing, leathers, asbestos products, and outboard motors. The area enjoys excellent railroad transportation facilities, as well as an outlet for shipping through the Great Lakes water route by means of an excellent harbor at Waukegan. The principal industrial establishments, together with the approximate number of present employes, are listed below:

Industry	Approximate No. of Employes
Johns-Manville Corp.	1,750
American Steel and Wire Company	1,700
Abbott Laboratories	1,100
Zion Institutions & Industries	650
Griess Pfleger Tannery	575
Chicago Hardware Foundry	550
Johnson Motor Company	450
American Can Company	400
Cyclone Fence Company	375
Fansteel Metallurgical Corp.	325
The Oakes Products Corp.	250
Sager Lock Company	250
National Envelope Company	225
National Office Supply Company	150
Automotive Maintenance Machinery Company	100

Because of its industrial background, this district is, of course, subject to relatively wide fluctuation with respect to sources of employment and economic support. Inasmuch as the company's territory includes practically all of the industries in Lake County, and since practically all of the industrial establishments are located in the Waukegan district, the following figures summarized from the biennial Census of Manufactures affords a good indication of the fluctuation in industrial activity for the Waukegan district during the past nine years.

Year	No. of Establishments	Wage Earners	Wages	Value of Products	Value Added by Mfg.
1937	128	9,686	$12,470,472	$72,610,134	$34,041,165
1935	126	8,653	10,216,556	56,277,063	27,560,806
1933	97	5,986	5,920,023	34,821,825	18,758,262
1931	122	6,514	7,871,689	51,752,686	26,908,552
1929	142	8,577	13,467,126	74,865,824	36,036,843

It should be noted that the number of wage earners shown above does not include salaried employes and executives of the various industries involved. The above figures show that between 1929 and the 1933 depression bottom there was a decline of 30 per cent in the number of wage earners, but during the subsequent recovery the number of employes showed an increase of 62 per cent between 1933 and 1937, and by the latter year there were 13 per cent more workers employed in industry than in the 1929 prosperity year. This is a very significant showing, and is accounted for by the fact that a number of industrial establishments such as Johns-Manville, and Abbott Laboratories, for example, expanded their manufacturing facilities in the Waukegan area considerably during recent years.

From the standpoint of wages paid to employes, the annual payroll between 1929 and 1933 showed a decline of 56 per cent, but in the subsequent recovery between 1933 and 1937, the payroll figures showed an increase of 111 per cent. It should be noted, however, that in spite of this increase, the wages paid to workers in 1937 were still 7-1/2 per cent below those paid in 1929, even though the industries were employing more workers in 1937 than the number employed in the 1929 predepression peak. This indicates that a number of the wage earners in 1937 worked only part time and in addition, although hourly wage rates in 1937 might have been at least as high or higher than those paid in 1929, the shortening of hours resulting from Federal legislation reduced the average worker's pay check. The average annual wage per worker in 1937 amounted to about $1,290 as compared with about $1,000 for 1933 and $1,535 for 1929. In other words, the 1937 average annual wage per worker was about 16 per cent less than the 1929 average. Incidentally, the average wage figures discussed above do not afford a proper criterion as to the average spendable money income per family, as they do not include the much higher average wages paid to salaried employes engaged in industry and since many families have more than one gainfully employed member. In general, we believe that the industrial background of the Waukegan district compares favorably with that of a number of other industrial areas which we have analyzed. The industrial background of the Waukegan area appears to be well diversified, the district has enjoyed good industrial growth during recent years, and offers prospects for additional such growth in the future. The location of the various industries in this area is favorable with respect to transportation facilities and proximity to their markets.

In addition, Waukegan, the largest community served by the company, is an important retail trading center for a trading area extending about 10 miles north, 15 miles south, and 30 miles west. Retail sales in 1939 were approximately $360 per capita. The city is also the county seat of Lake County. As noted from a preceding tabulation, Waukegan showed an excellent growth of over 74 per cent between 1920 and 1930, and a further favorable growth of about 19-1/2 per cent is indicated between 1930 and 1940. The racial distribution of population according to the 1930 census was 76 per cent native white, 19.3 per cent foreign born white, and 4.7 per cent negroes and other races. This distribution indicates a relatively high percentage of foreign born population, but this is well in line with the conditions found in other industrial communities. Because of the primarily industrial background, living standards in Waukegan do not appear to be exceedingly high, but effective average buying income per family compares favorably with that prevailing in other territories of similar nature which we have analyzed.

The suburban towns along the North Shore comprising the Lake Forest, Highland Park and Winnetka districts, and including the cities of Winnetka, Glencoe, Highland Park, Lake Forest, are all high-grade residential communities, and constitute what is probably one of the wealthiest suburban regions in the United States. These districts enjoy high living standards, and most of the gainfully employed people are commuters occupying positions in Chicago. Practically all of the population is native white, and as noted from a preceding tabulation, a large growth occurred in all of these communities, particularly between 1920 and 1930, ranging from nearly 100 per cent in the case of Highland Park to nearly 80 per cent for Lake Forest. While these districts have been built up appreciably, there is still considerable vacant land available for expansion, and as previously noted, they have been enjoying a revival of residential building construction during the past several years.

The western portion of the Lake Forest district includes several small communities likewise primarily residential suburban, but is less wealthy than the other communities along the North Shore. The largest of the western suburbs is Deerfield. This portion of the territory, however, includes a number of large wealthy estates which are not conducive to good customer density, except in the event of future subdivision into smaller parcels followed by the building of additional residences.

The Libertyville district comprises the western part of the territory which centers around the village of Libertyville. This region is primarily of rural and farming economic background, and as will be seen from the attached map of the territory, it includes a number of lakes with summer resort facilities. The principal economic support of the rural territory is largely dairying and truck farming depending on the Chicago metropolitan area as a market outlet. Many people living in Libertyville are employed in Chicago.

The territory taken as a whole possesses both attractive and unattractive features when considered from the standpoint of the operation of a gas company distributing manufactured gas. The high living standards prevailing in the high-grade residential suburbs, fundamentally, afford an opportunity for the development of high gas consumptions on a per customer basis under proper rates coupled with an aggressive load-building program. On the other hand, this favorable condition is offset to a very large extent by a low customer density per mile of main which is brought about by the fact that the territory contains many large estates and homes and by the absence of apartment districts found in territories of other companies and which have a favorable effect on the average customer density per mile of main. The North Shore suburbs under discussion, consist mostly of single dwellings and have only a minimum of duplex residential buildings and practically no apartment buildings, taken as a group.

In connection with utility operations, it is well recognized that, other factors being equal, customer density and average consumption per customer are two very important factors in the ability of a utility company to conduct profitable operations at competitive rates. Therefore, in considering the relative position of the territory served by the North Shore Gas Company, due consideration must be given to these factors, and with this in mind, we are showing in the table below the customer density in terms of meters per mile of transmission and distribution main, together with average annual gas consumption per meter in the various operating districts, based on 1939 operating results:

District	Meters per Mile of Main	Annual Sales per Meter M.C.F.	Annual Sales per Meter Revenue
Waukegan	67.3	34.3	$37.00
Lake Forest	36.4	60.5	64.50
Highland Park	50.7	72.5	63.20
Winnetka	69.3	96.5	79.50
Libertyville	30.1	29.9	34.90
Entire Company	52.8	55.2	53.00

The above figures are based on a breakdown of meters by districts as of December 31, 1939, and the available data apparently includes a number of locked-off meters which we were unable to segregate. As a result, the figures showing the average number of meters per mile of main are somewhat overstated, while those giving the annual sales per meter are somewhat understated. However, this discrepancy is not of great importance, and the above figures may be considered fairly accurate for the purpose of showing the relative density and consumption for the various operating districts. The above qualification does not apply to the "Entire Company" figures as these are based on the number of active meters.

The above table indicates that the Winnetka district makes by far the best showing, both from the standpoint of average customer density and average sales per meter, and that the Libertyville district constitutes the poorest field as far as present conditions are concerned. While the average customer density in the Lake Forest district is also relatively low, this is offset, to a considerable extent, by a higher average annual consumption and revenue per meter, and the same holds true of the Highland Park district. The higher customer density enjoyed by the Waukegan district, on account of the good customer concentration within the city itself, is apparently offset very materially by the limited usage of a relatively large number of customers, and the average annual consumption of 34.3 M.c.f. per meter experienced in 1939 is particularly low when consideration is given to the fact that it includes a relatively substantial amount of gas sold to a number of large industrial users.

It will be noted that for the company as a whole, the customer density is equivalent to only about 53 active meters per mile of transmission and distribution main, which is very materially lower than the density usually enjoyed by a preponderance of gas companies in the United States, as will be shown in a subsequent comparison. An important factor responsible for this low customer density is the relatively large mileage of transmission lines which had to be installed in order to interconnect the various communities served in the territory. These transmission lines, which have an aggregate length of some 135 miles, run through sparsely populated territory between the intervening towns and as a result afford direct service to only 424 consumers along the rural routes between towns. In addition, even some of the communities served by the local distribution lines are not highly concentrated in relationship to the miles of distribution main required to serve them, and this further dilutes the average customer density for the system as a whole. This factor will be evident from the following tabulation, which gives the customer density for individual towns, taking into account only the miles of distribution main within each community:

	Meters per Mile of Distribution Main	Year 1939 Average Consumption per Meter - M.c.f.
Waukegan District		
Waukegan	101.5	31.3
North Chicago	81.4	45.7
Zion	49.5	34.0
Winthrop Harbor	64.0	25.2
Great Lakes	46.2	67.8
Gurnee	118.2	37.0
Wadsworth-Russell	105.0	32.0
Average for District	88.7	34.3
Lake Forest District		
Lake Forest	60.2	62.2
Lake Bluff	52.8	53.3
Average for District	58.5	60.5
Highland Park District		
Highland Park	74.1	85.4
Highwood	85.3	27.4
Deerfield	30.7	49.8
Fort Sheridan	27.8	75.4
Average for District	62.2	72.5
Winnetka District		
Winnetka & Hubbard Woods	93.2	93.7
Glencoe	67.3	102.2
Average for District	82.3	96.5

	Meters per Mile of Distribution Main	Year 1939 Average Consumption per Meter - M.c.f.
Libertyville District		
Libertyville & Rural	63.8	35.3
Grays Lake	44.3	23.6
Gages - Druce - Third Lakes	52.3	13.2
Mundelein	24.4	33.5
Diamond Lake	47.7	19.9
Half Day - Prairie View	75.5	70.2
Average for District	49.8	29.9
Entire Territory	73.5	55.2

It will be noted from the above table that a large number of the individual communities, even when examined in the light of distribution facilities alone, yield a rather poor average customer density under existing conditions and this, fundamentally, places a severe handicap upon the company from the standpoint of profitable operations at rates sufficiently low so as to attract a large volume of business in competition with other fuels or electricity.

As a matter of interest, we are giving below a tabulation which affords a comparison of the company's density and average annual sales figures per meter with similar data covering a number of other companies which we have analyzed. Since the B.t.u. content of the gas differs for the various companies, the annual gas sales per meter are given in therms in order to place the figures on a comparable basis.

	Meters per Mile of Main	Annual Sales per Meter Therms	Annual Sales per Meter Revenue	Av. Rev. per Mile of Main
North Shore Gas Company	52.8	311	$53.00	$280
Western United Gas and Electric Co. (1)	45.0	411	46.20	208
Public Service Company of Northern Illinois (2)	72.3	758	56.80	410
Peoples Gas Light & Coke Co.	240.0	623	45.50	1,090
Milwaukee Gas Light Company	123.0	216	31.00	382
Madison Gas & Electric Co.	104.0	269	42.10	438
Wisconsin Gas & Electric Co.	57.4	206	35.80	206
Minneapolis Gas Light Co.	137.0	321	41.30	565
Northern Indiana P.S. Co. (2)	61.7	978	53.50	330
Portland Gas & Coke Co. (2)	37.4	235	40.80	153

Note:
(1) Year ended December 31, 1937
(2) Year ended December 31, 1938
All other figures are for year ended December 31, 1939.

It will be noted, from the table above, that companies such as Peoples Gas Light and Coke Company, Minneapolis Gas Light Company, Milwaukee Gas Light Company and Madison Gas and Electric Company which have confined their gas operations within concentrated metropolitan areas, enjoy densities running between 104 and 240 meters per mile of main, whereas the North Shore Gas Company, Wisconsin Gas and Electric Company, and Western United Gas and Electric Company, which have reached out with transmission lines to cover sparsely populated territories, have densities of less than 60 customers per mile of transmission and distribution main. The above-mentioned other companies, however, have the benefit of joint operation of an electric utility department, whereas North Shore Gas Company must depend entirely on gas operations. The much higher average annual consumptions shown for companies such as Peoples Gas Light and Coke Company, Public Service Company of Northern Illinois, and Northern Indiana Public Service Company, reflect large volumes of industrial gas sold by these companies, a large proportion of which is sold on an interruptible basis. It is of interest to note, however, that North Shore Gas Company, whose market is primarily residential and commercial, has a relatively high average usage per customer, with a corresponding favorable average annual revenue per meter.

In the above table, we have also shown the annual revenue per mile of main. It is worth noting, in this connection, that, all other things being equal, companies having high revenue per mile of main are comparatively profitable, whereas others are not. Western United Gas & Electric Company, for example, which has a low revenue per mile of main, earns only a limited return on its gas property investment, whereas a more satisfactory return is earned by Public Service Company of Northern Illinois. On the other hand, the very high revenue per mile of main earned by Peoples Gas Light & Coke Company is offset by the high cost of gas and by high other operating expenses. In addition, a substantial portion of the revenue of this company comes from interruptible industrial sales which yield only a very small margin of profit over and above the cost of gas to the company. Minneapolis Gas Light Company, with a much lower density than Peoples Gas Light & Coke Company earns a very satisfactory rate of return. At the present average consumption per meter, the earnings of North Shore Gas Company could increase very substantially upon material increase in customer density as the territory builds up, other factors remaining the same.

Apparently the North Shore Gas Company will require a considerable further population growth in its territory, in order to place its operations in a more favorable position with respect to the above discussed fundamental factors affecting the cost of service. As previously noted, the territory has resumed its growth, and considerable further growth is a reasonable expectation, as time goes on, since much of the suburban area covered by the company's existing mains is highly attractive from the standpoint of new home building. Furthermore, it is reasonable to expect that such future growth will be largely intensive rather than extensive. In other words, a very large proportion of the future new customers will be in the proximity of the existing mains, thereby requiring only small line extensions, and this should tend to improve the customer density as time goes on. This conclusion is supported by the company's experience during recent years and by the general layout of the existing transmission and distribution facilities. It is of interest to note in this connection that the new services installed during recent years, in terms of the net increase in the mileage of mains, were equivalent to 450 customers per mile of main in 1935, 151 in 1936, 183 in 1937, 169 in 1938, and 103 customers per mile of main in 1939. This is considerably in excess of the present composite average of 52.8 meters per mile of main for the system as a whole and readily shows that a large number of the new services installed during recent years were taken off existing mains with very little installation of new main line extensions.

<u>Summary</u>: To summarize the situation, the territory served by North Shore Gas Company possesses many attractive features favorable to gas utility operations. The territory, as a whole, is relatively stable as the industrial fluctuations in the Waukegan District are offset by the stable residential nature of the other districts. The suburbs served along the North Shore constitute what is probably one of the wealthiest suburban districts in the United States and the high living standards prevailing in these high-class residential suburbs, fundamentally, afford a good market for the development of high gas consumption per customer under a proper rate structure, coupled with an aggressive load-building program.

An unfavorable factor in the situation, however, of fundamental importance is the present low customer density per mile of transmission and distribution main. Evidently, the present transmission and distribution facilities were built to serve a much larger population than that which now exists, but the phenomenal population growth which was experienced during the 1920-1930 decade was interrupted by subsequent economic depression. The growth, however, has been resumed, the building of new homes in the company's territory has been accelerated during the past few years, and it is likely to continue at a rapid rate, particularly during a period of normal economic conditions. The North Shore residential suburbs provide much more attractive living conditions than other suburbs in the Chicago area and it is logical to expect that they will attract much of the population migrating away from the congested Chicago area over a period of years. The increase in population which is likely to take place will, in turn, increase the customer density, thereby tending to offset this presently unfavorable factor as time goes on.

Coke Market. All of the gas manufactured by the Coke Company, except that used for underfiring its ovens, is sold to the Gas Company as previously mentioned. In addition, incident to the production of gas, the Coke Company produces and sells a large volume of coke, and also produces and sells other by-products namely, sulphate, sulphur paste, and tar. In 1939 coke sales accounted for 49 per cent of the company's gross operating revenue, and it is therefore evident that the coke business is a very important element in the company's operations.

The company is currently selling its coke through Pickands, Mather & Company, who also act as sales agents for a number of other coke producing companies, under an arrangement which will be discussed in a subsequent chapter of this report. The Coke Company also supplies direct to the Gas Company the latter's entire coke requirements for generator fuel used in connection with the manufacture of water gas. Because of the importance of coke sales in the total picture, the following discussion of the coke market of North Shore Coke & Chemical Company will be of interest.

An analysis of the coke sales shows that during the past fuel year ended March 31, 1940, about 93½ per cent of the total sales was accounted for by the domestic market while the remainder 6½ per cent represented sales to industrial users. The distribution between these two classes was about the same for the fuel year 1939, but in the years 1936 - 1938, the industrial sales were higher and accounted for 10 per cent of the total sales in 1938, 18 per cent in 1937, and 16.7 per cent in 1936. Most of the industrial coke is sold to two plants in Waukegan, one plant in Nebraska, and to a utility company in Wisconsin for water gas generator fuel.

As evidenced by the above analysis, the bulk of the coke is sold for domestic fuel. A further analysis of domestic sales shows that about 50 per cent of the total tonnage is sold within the North Shore Gas Company's territory, and in that respect it competes, at least to some extent, with the Gas Company's gas house heating market, about 33 per cent in the western Chicago suburbs and in the so-called Fox River Valley territory extending from McHenry down to Aurora, and 17 per cent is sold to various towns in Wisconsin such as Madison, Janesville, Beloit and Racine. A very small amount of domestic coke is sold in Iowa. Under present conditions, the company does not compete in the Chicago coke market, nor does it sell coke in Evanston, Wilmette, and a few other suburbs adjacent to Chicago.

An analysis of the situation points to the conclusion that this company enjoys a relatively good coke market, with a favorable freight differential for most of the territory in comparison with the freight rates which other coke producers have to pay in order to reach this market from their respective coke plants. The results of an analysis made by the company of coke samples produced by various other companies show that the quality of the company's coke compares very favorably from the standpoint of fixed carbon, ash content and other considerations.

It should be noted, however, that coke prices in general are dependent upon the price of competing fuels and upon conditions of supply and demand. Weather conditions, among other things, exert an important influence with respect to the latter factor, whereas the production of coke is governed to a large extent by the gas requirements of North Shore Gas Company regardless of weather conditions or other factors. While under present conditions and coke output the market is able to absorb the coke without necessitating so-called "distress sales," the factors briefly discussed above tend to cause relatively wide fluctuations in the earnings, and, therefore, to a large extent, the Coke Company has the characteristics of an industrial concern. These factors will be discussed in more detail in a subsequent chapter of this report.

The other by-products are sold directly by the Coke Company to a relatively limited number of accounts. Gross revenue from these by-products, in 1939, amounted to about $99,000 as compared with coke sales of $521,804, and gas sales of $546,132.

The Coke Company is carrying on research work toward the development of other by-products in connection with the gas manufacturing process, and this might lead to new discoveries in the future, although there are no tangible indications to that effect at the present time.

PROPERTY

The physical properties owned by North Shore Gas Company include two water gas plants, both located in Waukegan and having an aggregate daily production capacity of about 8,000,000 cu. ft., and three gas storage holders with aggregate storage capacity of 4,000,000 cu. ft., about 515 miles of transmission and distribution main, together with the necessary pressure regulators, meters, and other property of general nature required to supply gas utility service in the various communities.

One of the water gas plants is known as the North Plant and is located on approximately 16 acres of land owned in fee on the north side of Waukegan about a half mile west of the shore of Lake Michigan. The gas generating equipment at this plant was placed in operation in 1927 and consists of an 11', 3-shell, Lowe type, carburetted water gas set equipped with automatic control. This set has a daily production capacity of 3,500,000 cu. ft., but during peak periods it is capable of a daily output of 4,000,000 cu. ft. of gas. The steam required for the production of water gas and for operating the compressors at this location is obtained by means of 3 - 500 horse-power boilers, one of which is held for reserve purposes. The regularly operated boilers are rated at a pressure of 145 pounds, while the third has a rating of 125 pounds per square inch. The compressor equipment consists of 2 steam-driven units. One of these, a Nordberg cross-compound duplex gas compressor was installed in 1920 and has a capacity of 250,000 cu. ft. per hour. The other is an Allis-Chalmers cross-compound duplex engine which was installed in 1923 and has a capacity of 500,000 cu. ft. per hour. The company will install another Nordberg compressor at this location during 1940 and this will provide an additional compressor capacity of 250,000 cu. ft. per hour. Also, at the North Plant are a gas storage holder of 1,500,000 cu. ft. capacity and a 200,000 cu. ft. relief holder. The North Plant is also equipped with the necessary scrubbing, purifying, metering and other auxiliary equipment and also has two large oil storage tanks where the company stores its enricher oil used in the production of water gas. At the North Plant there is also located a small oil fogging station used in connection with the low pressure distribution system serving the City of Waukegan. The North Plant also serves as the receiving station for the coke oven gas which the company purchases from the North Shore Coke & Chemical Company.

The North Plant was formerly the location of an old coal gas plant which was abandoned many years ago. The building formerly housing the coal gas equipment is still in use for storage purposes, but the coal gas equipment has been removed. This building is not in very good shape, but the other buildings housing the facilities now in use are in good operating condition. The North Plant is in regular use, particularly during the peak load months, and in 1939 it produced about 17 per cent of the company's total gas requirements for that year. The equipment described above is in good operating condition and has been well maintained. This plant site has considerable land for future expansion of gas generating facilities should this be necessary.

The South Plant is located approximately one mile directly south of the North Plant in the City of Waukegan. This plant occupies an area of approximately 1.8 acres of which 1.4 acres are owned in fee and the balance is leased until December 1, 1952, from the Elgin, Joliet & Eastern Railway Company. This plant was originally built in 1898 as a coal gas plant, but it was converted to water gas operation in 1917. The present production equipment consists of 2 - 8'6" United Gas Improvement water gas sets installed in 1917. Both water gas machines are hand-operated and their aggregate production capacity is 4,000,000 cu. ft. of gas per day. The boiler room equipment includes 3 horizontal-tube boilers which are quite old and are operated at 100 pounds pressure. There is also a water-tube type boiler operated at 150 pounds pressure which is in much better condition, being about fifteen years old. This station is also equipped with an old Ingersoll Rand steam-driven compressor with a capacity of 80,000 cu. ft. per hour. This compressor is probably 30 years old. The purifying equipment consists of three individual bottom dump purifier boxes. At the South Plant site the company also owns a 500,000 cu. ft. gas storage holder which is regularly used for the low pressure distribution of gas in the City of Waukegan and also owns a relief holder of 160,000 cu. ft. capacity which is used in connection with the generation of water gas. The storage holder has been maintained in very good operating condition.

The South Plant is used mainly for standby purposes but is operated intermittently, from time to time, in order to make sure that the equipment is maintained in shape for peak-load and emergency purposes whenever necessary. The annual sendout from this plant, however, is very small and has varied between 0.1% and 0.4% of the total annual gas requirements of the system during the past four years. From a recent inspection, it would seem to us that this plant is rapidly approaching the end of its useful life from the standpoint of efficient operation and should probably be retired within the next several years.

At the South Plant site, the company also maintains a pipe yard and a garage building both of which are useful in the company's operations.

Before going into a discussion of the transmission, distribution and other facilities owned by the company, we shall discuss, at this juncture, the coke oven plant of North Shore Coke & Chemical Company, as this plant is the principal source of supply to the Gas Company's system and furnishes between 80 per cent and 90 per cent of the total annual gas requirements.

The coke oven gas plant is located in the City of Waukegan about 0.8 mile south of the North Plant. The plant oc upies approximately 42-1/4 acres of land bounded on the east by Lake Michigan and extending on the west to the center line of a channel which is an extension of the Waukegan Harbor. This site affords excellent facilities for bringing in the coal by water route over the Great Lakes, thereby resulting in more economical freight costs than would otherwise have been the case if the coal requirements of the plant were to be transported entirely by rail. The plant is equipped with a large steel and concrete dock and with efficient coal unloading equipment. This site also includes a large coal storage yard from which the coal is conveyed to the ovens by means of endless belt conveyors. The plant is also equipped with railroad trackage facilities owned by the Coke Company and connecting with the tracks of the Elgin, Joliet, and Eastern Railway Company, which in turn, connects with principal railroads in the Chicago district. The company also owns two steam locomotives and nine hopper cars used principally for the handling of coke from the ovens to the storage pile.

The plant was placed in operation in 1928. The gas generating equipment consists of 31 Koppers Company Becker type ovens of 9.1 tons capacity each and with an aggregate normal carbonizing capacity of 450 tons of coal per day. Up to the fall of 1937, a portion of the coal gas generated was used for underfiring the coke ovens, and this limited the maximum daily sendout of the plant to about 3,100,000 cu. ft. In September, 1937, however, the Coke Company installed a producer gas plant for the underfiring of the ovens and this has raised the daily sendout capacity of the plant to 5,200,000 cu. ft. Such amount of the producer gas that is not required for underfiring is mixed with the coal gas to a proper B.t.u. content and transmitted to the Gas Company's system. The coke oven plant is used to carry the base load of the system while the peaks are taken care of partly by means of producer gas or by water gas generated at the Gas Company's plants, as will be discussed in more detail in a subsequent paragraph.

Under the present arrangement, the Coke Company sells its gas to the North Shore Gas Company in an unpurified state, but before the gas is transmitted to the system, it is purified by means of purification equipment owned by the Gas Company but located at the Coke Company's plant on land owned by the Coke Company. The coke oven gas is transmitted to the North Plant by means of transmission lines owned by the Gas Company and there it is mixed with water gas. That portion of the gas used for the so-called low pressure system serving the City of Waukegan is mixed to a heat content of about 565 B.t.u.'s per cubic foot and is, in turn, transmitted to the holder at the South Plant from where it is supplied into the Waukegan distribution system. The balance of the gas is mixed to a heat content of 540 B.t.u.'s per cu. ft. and it is pumped into the high pressure transmission system supplying all of the area outside the City of Waukegan. These B.t.u. standards are in accordance with the requirements of the Illinois Commerce Commission.

In addition to the equipment described above, the plant of the Coke Company also includes machinery and equipment for the extraction and preparation of the various gas by-products for the market. The Coke Company also owns and operates an electric steam generating station at this site which furnishes all of the electricity and steam required in the operations of the plant. The electric generating equipment consists of two steam turbo-generators of 750 kw. capacity each, equipped with surface condensers. The condenser water is obtained from the harbor through a 24" cast iron line. One of the steam turbines is of the extraction type and some steam is bled from it and used for heating purposes. The boiler room equipment includes 2 - 500 horse-power boilers operated at 250 pounds pressure and 510° F. temperature.

In general, the coke oven plant, together with its steam generating, by-product, and other auxiliary facilities is of good design and has been maintained in excellent operating condition. The various buildings are of reinforced concrete and brick construction. In addition to the buildings housing the various equipment, the Coke Company also owns an office building at this location which is used as the operating headquarters for the plant. The present site affords considerable room for future expansion of the plant capacity.

The Gas Company also owns a pumping station known as the Deerfield Station which is used for regulating the distribution of gas in the southern portion of the territory served. The Deerfield Station was built in 1926 and is located on a 58-acre tract of land just south of the county line along the main line of the Chicago, Milwaukee, St. Paul, & Pacific Railroad, about 1½ miles south of the Village of Deerfield. The existing facilities, however, occupy only a small part of this land. Apparently, when this site was purchased years ago, the company planned to use it as a location for a future water gas plant but the economic justification of such a plant at this location will have to be examined in the light of future developments.

The present facilities comprising the Deerfield station include a 2,000,000 cu. ft. waterless type gas holder and a boiler house and compressor station. The compressor equipment consists of two Nordberg cross-compound duplex steam gas compressors each having a capacity of 250,000 cu. ft. per hour and this equipment is housed in a brick building of substantial construction. The boiler equipment is in a separate brick building located adjacent to the compressor room and includes 2 - 300 horse-power stoker fired boilers operated at about 175 pounds pressure. All of the above facilities, including the storage holder, are in very good operating condition. The Deerfield station is absolutely indispensable in the company's operations and is strategically located with respect to maintaining reserve supply and proper regulation for the southern end of the distribution system. Incidentally, this station is equipped with an automatic pressure recording instrument which enables the operator to maintain proper pressure at all times.

As of December 31, 1939, the Gas Company had 514.3 miles of transmission and distribution mains in service and of this total about 135 miles is classed as transmission mains. The general layout of the transmission system ~~is~~ shown on the attached map. As will be noted from the map, the transmission system provides duplicate sources of supply to the more important communities by means of belt-line loops and, in our opinion, the transmission layout is well engineered. The diameter of the transmission pipes varies from 16" down to 2", but the preponderant sizes are of 8", 6" and 4" diameter. There are about 38 miles of 8" diameter transmission main, 34 miles of 6", about 50 miles of 4", and about 17 miles of 2" diameter pipe. The transmission mains interconnecting the various gas plants are of 16" and 12" diameter.

The transmission system is operated at maximum pressures varying from 70 pounds per sq. in. at the North Plant, to 2 pounds per sq. in. at the extreme south end at Winnetka. During low load periods, the system is operated at lower pressures. As previously stated, the distribution system supplying the City of Waukegan is fed directly from the storage holder at the South Plant at a low pressure varying from 5" to 8". The distribution systems serving all other communities are fed directly from the high-pressure transmission system described above, and the pressure at each customer's service is regulated by means of individual pressure regulators. In addition, the transmission system has a number of pressure governors situated at strategic locations, and this enables a number of individual distribution systems to be operated at intermediate pressures. In order to secure better flexibility in pressure regulation under maximum day sendout conditions, such as those which the system encountered during the extreme cold weather experienced during the past winter season, the company plans to install five additional pressure governor stations this year at various points on the transmission system between Lake Bluff and Highland Park. This will enable the system to maintain sufficiently high pressures in this area, and still keep the pressures on the lightly loaded outlying lines to the west within proper limits. The five additional governor stations will insure better pressure control throughout the system and will entail a capital expenditure of only about $10,000.

The distribution mains vary in size, with the larger mains having a diameter of 8" and the smallest mains having a diameter of 1-1/4". The preponderant sizes are of 6", 4" and 2" diameter, and inasmuch as the distribution mains outside of the City of Waukegan are operated at high pressures, the pipe sizes used represent economical design, in our opinion.

Most of the transmission and distribution lines are steel, although there are about 56 miles of cast iron pipe, 65 miles of wrought iron pipe, and about 50 miles of extra-heavy wrought steel pipe. The cast iron mains are confined mostly to the Waukegan, Lake Forest, and Highland Park distribution systems. The cast iron pipes are not coated, as this class of construction does not need any coating and has a very long life. Of the wrought iron and steel mains, about 69 miles are galvanized, and about 300 miles are treated with some kind of a coating or wrapping. With galvanized pipe included, it can be said that about 81 per cent of the wrought iron or steel pipes are coated. All of the steel pipe laid subsequent to 1926 has been coated with No-Oxide paste and wrapped with Teco fabric, and this standard is still being adhered to at the present time. The coating and wrapping of steel pipe, of course, guards against the effect of any adverse soil conditions and protects the pipes against corrosion, thereby insuring a longer life than would otherwise be the case. With regard to soil conditions encountered in the company's territory, while we did not make any soil tests, we discussed this factor extensively with the operating officials of the company. These discussions point to the conclusion that soil conditions, as a whole, are normal. The territory along the North Shore has a sandy soil which does not give rise to alkali conditions that cause corrosion. So far as we have been able to ascertain, there are only a few minor spots on the system where alkali conditions exist, and these are located near Everett north of West Lake Forest, near Deerfield, and in a small section of North Chicago behind the Northwestern Railroad freight depot.

It is of interest to note that during the past 14 years the company has installed approximately 218 miles of new transmission and distribution mains, while the mains replaced or abandoned amounted to only 43 miles. In other words, about 42-1/2 per cent of the transmission and distribution main mileage now in service was installed during the past 14 years. Construction was particularly heavy during the period 1926-1930 inclusive, as a total of 191 miles of main were installed during that period.

The annual leakage and unaccounted-for gas losses during the past five-year period were as follows:

Lost and Unaccounted-For Gas	1939	1938	1937	1936	1935
In % of Annual Sendout	10.95	9.66	9.35	11.38	11.00
Per Mile of 3" Equivalent Main (M.c.f.)	318	263	240	280	258

While on a percentage basis the above figures are reasonable, the annual M.c.f. loss per mile of 3" equivalent main appears to be somewhat high in comparison with the experience of some of the other gas systems which we have analyzed. It should be remembered, however, that this is a high-pressure system and consequently its losses are expected to be higher than those encountered on the usual low-pressure systems. Taking this factor into account, we are of the opinion that the above losses are not excessive and indicate that on the whole the transmission and distribution lines are in good operating condition. A large proportion of the steel transmission and distribution mains have welded joints, while most of the balance is of screw joint construction, although some of the lines use Dresser couplings. The cast iron mains are tied together by means of lead joints.

The general property owned by the Gas Company includes a 3-story office building of brick and concrete construction, situated in the business district of Waukegan. This is used as the general office headquarters of the company, and in addition, it houses the appliance sales store on the main floor. The company also owns a one-story brick building and a garage building in Glencoe which serve as the service headquarters for the southern district.

The company maintains district offices and appliance stores at Winnetka, Highland Park, Lake Forest and Libertyville, but these are housed in rented quarters. The Winnetka quarters are covered by a 20-year lease which runs to April, 1950. The company paid a rental of $600 per month for the first 10-year period and now pays $700 per month for the second 10-year period. It seems to us that under present conditions this lease arrangement is burdensome to the company as the office space required to carry on the operations of the Winnetka district could be provided at a considerably lower cost under present conditions, had this long-term lease not been in effect. The Highland Park office space is rented at $250 per month under a lease which runs five years from May 1, 1937. The rental paid for the Lake Forest office space amounts to $125 per month, while that paid for the Libertyville office space is $80 per month, and these appear to be reasonable rentals in relationship to the location and space occupied.

In our opinion, based on a recent inspection and study of the physical properties, these facilities have been well maintained and are generally in good operating condition at the present time, except the South Plant which is rapidly approaching the end of its economic life. The system layout whereby the communities distant from the Waukegan source of gas supply are served at high pressures provides economical operation, particularly from the standpoint of the investment entailed at the existing low customer densities. The adequacy of the facilities is discussed below in considerable detail.

Adequacy of Present Facilities and Other Related Factors. Before drawing a conclusion as to the adequacy of the existing production facilities, a discussion of the division of load between the various gas plants, as well as an examination of the company's load curve is of interest. The volume of gas produced at the various plants during each of the past 3 years in M.c.f. as well as in per cent of the total amount produced is shown in the following table:

	1939		1938		1937	
Source	M.c.f.	% of Total	M.c.f.	% of Total	M.c.f.	% of Total
North Plant	317,575	16.9	164,969	8.7	250,334	12.5
South Plant	2,026	0.1	4,857	0.2	7,966	0.4
Total Produced by N.S.G.Co.	319,601	17.0	169,826	8.9	258,300	12.9
Purchased from N.S.C.& C.Co.	1,566,906	83.0	1,721,100	91.1	1,741,037	87.1
Total	1,886,507	100.0	1,890,926	100.0	1,999,337	100.0

As will be noted from the figures above, the coke oven gas plant of North Shore Coke & Chemical Company accounted for the bulk of the Gas Company's annual requirements, and has been supplying between

83 per cent and 91 per cent of the total annual gas requirements of the system. Most of the balance was supplied from the North Plant of the Gas Company, while the South Plant has been supplying only a very minor portion and has been used mainly for peak-load and standby purposes, as previously stated.

The accompanying curve gives a graphic picture of the daily gas sendout of the system for the years 1938 and 1939, and for the first four months of 1940. In addition, this graph shows the division of load between coke oven gas, producer gas, and water gas, and also gives the daily and monthly mean temperatures and the active central house-heating jobs in service at the end of each period. The latter two factors are included because they have a very important bearing on the maximum day sendout of the system.

As will be noted from the graph, the coke oven and producer gas plants of North Shore Coke & Chemical Company carry the base load of the system, while the water gas facilities owned by the Gas Company carry the peaks. It will be noted also that the production of water gas is heaviest during the heating season, although there is some water gas production during the summer months, presumably in order to keep the coke pile down within reasonable limits in relationship to the anticipated demands of the coke market. It is of interest to note that during the months of May - September, 1939, there was a considerable water gas production. This is partly due to a coal strike which went into effect at a time when the Coke Company was about to bring in its year's coal supply at the opening of the navigation season. This strike, however, lasted only six weeks whereas the production of water gas continued for several months afterwards at a relatively heavy volume. It appears to us, therefore, that the Gas Company continued the production of water gas beyond the period necessitated by the coal strike probably in order to show an improvement in its income account for that year, as the average production cost per M.c.f. of water gas was lower than the average price it would have had to pay for gas purchased from the Coke Company. While this is of no serious consequence, it appears to us that if all of the production facilities were owned by one company, such an arrangement would result in more desirable flexibility toward operating the facilities as a whole to better economic advantage. It should be noted that under single ownership, and disregarding the fixed charges on the investment already made, the coke oven gas plant is by far the most economical source of supply, and its gas output is limited within practical limits only by the market's ability to absorb the coke production at a good price.

The significant point disclosed by the aforementioned graph is the tremendous increase which has occurred in the maximum daily sendout, particularly during the past winter season when the maximum day sendout established an all-time peak of 10,713 M.c.f. The date of this peak was January 18, 1940, and a large part of the tremendous increase that occurred was undoubtedly due to the extremely cold weather which was experienced on that date and which necessitated a large consumption on the part of house-heating customers. The relationship between the maximum day sendout and the number of house-heating customers served, for each of the past several heating seasons is shown in the following tabulation:

Heating Season	Maximum Day Sendout M.c.f.	% Increase Over Previous Season	No. of House Heating Installations	% Increase Over Previous Season
1939-1940	10,713	27	1,067	2.7
1938-1939	8,443	2	1,039	15.5
1937-1938	8,260	18.5	899	9.2
1936-1937	6,972	0.5*	823	71.0
1935-1936	7,014	19	482	36.5
1934-1935	5,900	12.5	353	12.0

* Decrease

It will be noted that the recent 1940 peak exceeded the previous season's maximum day sendout by 27 per cent, whereas the corresponding increase in the number of house-heating installations amounted only to 2.7 per cent. The recent peak was accentuated by the sub-zero weather which resulted in a daily mean temperature of about eight degrees below zero during the peak day. The increase in the maximum day sendout during the 1938 - 1939 season was quite small, owing to the relatively higher temperatures which prevailed during that season. It should be noted that the number of existing house-heating installations, when coupled with sub-zero weather is bound to cause extreme increases in the maximum day sendout, and this, in turn, will require the installation of additional production capacity in order to carry such peak loads if the company increases its number of house-heating installations to any material extent. As a general proposition, when the house-heating load served by a manufactured gas company is developed to a point where a substantial investment for additional facilities is required such load is not profitable at rates competitive with other fuels, and this is true of the company under investigation. The house-heating load has a rather poor annual load-factor of the order of 25 per cent, and this means that the facilities tied up in such service are fully used only a relatively short period of time in the course of a year. In addition, the connection of house-heating load beyond certain limits, results in a relatively low load factor for the system as a whole, unless a company is in a position to develop summer loads in order to counterbalance the poor load factor characteristics of the house-heating installations.

As a matter of interest, we are giving below the annual load factor of the gas company's system for a period of years. (The annual load factor may be defined as the ratio of the actual annual gas output to the maximum possible gas output if the system were able to deliver gas at the same rate as that experienced during the peak-day sendout, expressed as a percentage.) In the table below, the load factor is given on two different bases - (a) on the basis of the maximum day sendout and (b) on the basis of the average of the maximum day sendout, plus that of the day before and the day after such maximum day sendout. The annual load factors during the past several years have varied as follows:

	1939	1938	1937	1936	1935	1934
Maximum Day Basis	56.2	53.5	59.5	56.3	64.0	68.0
Three-day Average Basis	58.3	62.5	62.0	64.5	73.2	71.4

The above figures denote a relatively low annual load factor in comparison with the load factors enjoyed by other gas systems. A contributing factor to this showing is the peak imposed by the increase in the number of house-heating installations. For example, in 1934, when the company had only 353 house-heating installations on its lines, the annual load factor on a maximum day basis was 68 per cent, whereas due to the subsequent increase in the number of house-heating customers the load factor dropped to 53-1/2 per cent in 1938, and recovered to 56.2 per cent in 1939. Owing to the severe peak which occurred in January of this year, the annual load factor for 1940 will probably be lower than the 1939 figure. The load factor, of course, exerts a very important influence upon the average costs of doing business and an increase in the load factor through the development of summer loads to fill in the valley of the present load curve would have a decided beneficial influence upon net earnings.

It appears to us that under existing conditions the company will find it advisable to take on only a limited number of additional house-heating jobs, and its load-building efforts from here on would have to be more selective, if they are to be carried out on a more profitable basis. What we particularly have in mind is the development of the more profitable cooking, water heating and refrigeration load which is a year-round business, and comes at the higher steps of the rate schedule.

In comparison with the maximum day sendout of 10,713,000 cu. ft. experienced during the past winter season, the gas plants available to the system have a daily production capacity of 13,200,000 cu. ft., including the standby South Plant. In addition, of course, the system is backed up by storage holder capacity of 4,000,000 cu. ft. With the largest water gas machine out of service, however, the daily production capacity would be reduced to about 9,200,000 cu. ft., and this does not provide a large margin of protection during the peak-load season. To provide a better margin of safety, and in order to meet future increases in the peak demand, the company will provide a Butane gas installation at the North Plant during the latter part of 1940. Some of the equipment required for this installation will be transferred from the coke plant where Butane-air gas was formerly used for underfiring the ovens, and the total cost of the installation will amount to only about $10,000. The contemplated Butane plant will be used for peak load and emergency purposes only and will be capable of supplying about 3,500,000 cu. ft. per day, if necessary. Incidentally, because of gravity and other considerations involved in the mixing of gases, the amount of Butane gas that can properly be mixed with water gas and coal gas will have to be limited to about 20 per cent of the total volume.

The production cost of Butane-air gas is estimated at about 30¢ per M.c.f. exclusive of fixed charges on the investment, and this is a reasonable figure for peak-load gas.

Upon completion of the contemplated Butane gas plant, the company's production facilities will have sufficient capacity to take care of the growth in load for the next several years. However, in the event that the company continues to take on a large number of additional house-heating installations, the system will require additional generating capacity two or three years from now. Several alternatives are available for this purpose. One of these is to install additional water gas capacity at the North Plant or at the coke oven plant, or such additional water gas capacity could be installed at the Deerfield station site. This would require an additional investment of between $150,000 and $250,000. However, it is quite conceivable that two or three years from now the company might find it more economical to consider the use of natural or mixed gas for at least the southern portion of its system, and this would release sufficient production capacity to take care of the growth in the northern portion of the territory. Such mixed gas could probably be obtained from Peoples Gas Light & Coke Company through the transmission facilities of Public Service Company of Northern Illinois which now purchase substantially all of its gas requirements from Peoples Gas Light and Coke Company.

It should be noted in this connection that the natural gas situation in the Chicago area may undergo considerable change in the relatively near future. A rate case is now pending before the Federal Power Commission against the Natural Gas Pipeline Company of America which is the wholesale supplier of natural gas to the Chicago area. This case was brought by the Federal Power Commission and the Illinois Commerce Commission has been made a party to the action. The Illinois Commerce Commission has requested the Federal Power Commission to order an immediate reduction of $3,000,000 in the charges made for natural gas to the purchasing companies and the Illinois Commission estimated that a $3,000,000 rate reduction would still permit the pipeline company to amortize its entire average investment from the date of its inception to 1954, and at the same time earn a relatively good return on the average investment. It is highly probable, in our opinion, that this case, when finally settled, will result in a substantial reduction in the gate rate, thereby affording a more economical source of natural gas supply. It is highly possible, therefore, that the natural gas situation in this area could conceivably change to a point where its adoption could be found more economical for future expansion of load by companies such as North Shore Gas Company through conversion to mixed gas operation. It is also likely that some years from now a second natural gas pipeline would be built to Chicago in order to relieve the present line, and to provide a second source of supply, and in order to utilize such pipeline capacity effectively it is conceivable that a proper economic inducement can be afforded to North Shore Gas for changing over to mixed gas operation.

Another development that could conceivably have an important bearing on the question of the future possibilities of mixed gas operation is a recent application filed with the Federal Power Commission by Western Natural Gas Company on May 28, 1940. The applicant seeks a certificate of convenience and necessity for the construction of a 770-mile, 24" natural gas transmission line from the Hugoton, Kansas, field to Milwaukee, Wisconsin, with laterals to other Wisconsin communities, including the City of Kenosha, which is only 16 miles from Waukegan. Although we have obtained a copy of the above application and studied its contents, a detailed discussion of this project is premature at this time, except to note that if this pipeline is actually built it could conceivably make available to North Shore Gas Company an economical source of natural gas supply for mixed gas operation.

It should be noted that in the present study we did not make a thorough analysis of the economics of natural gas or mixed gas operation insofar as they would affect the future earnings of North Shore Gas Company. We believe, however, that the possibilities outlined above should be watched closely and should be given serious study and consideration at the proper time in the future.

The above discussion gives a general picture as to the adequacy of the present production facilities and various alternatives for taking care of future gas requirements. We shall now turn to an examination of the adequacy of the transmission and distribution systems.

The transmission system has ample spare capacity and could probably take care of a 50 per cent increase in the present annual gas send-out without material changes. About the only major need in the relatively near future is a 3-1/2 mile, 8" line extension in the vicinity west of Lake Forest in order to reenforce that section of the system, but this will require a capital expenditure of not more than $40,000. Except for possible minor extensions and for normal replacements, no other expenditures of major nature appear necessary for the transmission system during the next ten years.

The distribution system also has sufficient spare capacity to take care of at least a 50 per cent increase in load without necessitating reenforcements of material nature. As previously noted, the distribution systems outside of Waukegan are operated at high pressure, with separate regulators for each customer's service. This is a highly flexible arrangement, and in the event of heavy increases in load in certain parts of the system, the situation could readily be relieved by increasing the operating pressure. Furthermore, in the event of mixed gas operation whereby the heat content of the mixed gas would be 800 B.t.u. per cu. ft. as compared with the present 540 B.t.u. standard, the capacity of the distribution system would be automatically increased in proportion to the increase in the B.t.u. content.

The existing distribution lines are extensive enough to cover practically all potential customers in each community without lengthy line extensions, except in the outlying sections. It is estimated, however, that the company's service area includes about 1600 homes that are now beyond reach of the existing gas distribution mains, and most of these homes are located in the Waukegan, Libertyville and Highland Park districts. Probably 50 per cent of these homes now use electricity for cooking, and 560 homes use bottled gas. Even if the distribution facilities were expanded to reach these homes at some future time, the electric users cannot be considered as potential gas customers, at least for years to come. During the past few years, the company has been cooperating with the bottled gas dealers to the end of keeping as many of the outlying homes from going over to electric cooking and looking forward to a time in the future when the bottled gas installations would be cut over to the company's system upon extension of the existing gas mains to reach such customers. It appears to us that it would be advisable for the company to adopt a somewhat more liberal line extension policy, if its financial resources permit in the future, in order to keep the new homes in the outlying sections away from electric competition. In this connection, it is our feeling that although, initially, the new gas line extensions to such areas would yield a relatively low customer density, the future additional building of homes which is anticipated for such areas will increase the customer density to a point of bringing about a reasonable return on the investment in the facilities required to render the service.

VALUATION

Gas Company. The fixed capital of North Shore Gas Company as of March 31, 1940, was carried on the books at a gross figure of $10,105,291, while the depreciation reserve as of the same date amounted to $1,251,159, making the net book value of fixed property $8,854,132.

The above gross book figure includes various intangible items such as bond discount and expense charged to fixed capital during the years 1901 to 1915; par value of capital stock issued in the years 1900, 1908, and 1912, primarily for franchises, good will, etc., and various other intangible items. The company, however, in compliance with the Uniform System of Accounts prescribed by the Illinois Commerce Commission has made an original cost study of its property and plant account with the aid of Arthur Young & Company, certified public accountants. As a result of this study, the utility plant account was reclassified on the basis of original cost as of January 1, 1938. The basis of this reclassification is briefly as follows.

While the company's books showed a classification by primary accounts of the property constructed subsequent to June 30, 1918 on an original cost basis, no such breakdown was available for the property built prior to that date. It was found from the records, however, that the original cost of the property at June 30, 1918, amounted to $1,468,424. This figure was adjusted for subsequent retirements at original cost and the balance was allocated between the various primary accounts on the basis of an inventory and appraisal of the company's tangible property as of June 30, 1918, made by William A. Baehr, consulting engineer, and then Vice-President of the company in charge of operations. It should be noted that the aforementioned appraisal was used merely as a basis for allocating the property between the various classifications, but the figures themselves were based on original cost.

In connection with the above original cost figure of $1,468,424 representing the original cost of the property at June 30, 1918, it is interesting to note that the Illinois Public Utilities Commission (now Illinois Commerce Commission) in an order dated December 30, 1920 found the original cost of the used and useful property of the company, exclusive of going value and cash working capital and supplies to be $1,800,000 undepreciated. It is not clear from the Commission's order as to whether its finding of original cost applies to the property as of the date of the order, but it appears that the value found was as of December 31, 1919. The company's recent study of original cost shows a corresponding value of only $1,512,203 as of December 31, 1919, and $1,541,959 as of December 31, 1920, and both of these figures are considerably lower than the $1,800,000 original cost found by the Commission in the above-mentioned order. It appears that the Commission's figure included an item for bond discount and expense which was segregated under utility plant adjustments in the company's recent original cost study. In any event, from an examination of the work sheets of the company's recent study, it appears to us that the starting figure of $1,468,424 substantially reflects the original cost of the property involved and the same holds true of the figures representing subsequent net additions.

According to the company's study, the property and plant account as of December 31, 1939, is as follows:

Utility Plant in Service		
Intangible Property	$ 137,031.65	
Tangible Property	6,134,343.99	$6,271,375.64
Utility Plant Adjustment Accounts		
Utility Plant Acquisition Adjustments	2,098,135.01	
Utility Plant Adjustments	1,725,581.15	3,823,716.16
Total		$10,095,091.80

Net additions to tangible property between the end of 1939 and March 31, 1940, including work in progress, amounted to $10,198, making the total value of tangible property as of the latter date, $6,144,542.

The intangibles of $137,031.65 included above under "Utility Plant in Service" are made up of the following items:

Organization	$ 31,721.77
Franchises and Consents	102,002.93
Misc. Intangible Plant	3,306.95
	$137,031.65

The Illinois Commerce Commission has not passed upon the above original cost reclassification of the property and has not indicated what disposition should be made of the utility plant adjustment accounts. For the purposes of the present analysis, however, we would prefer to use the original cost tangible property figure of $6,144,542 as a basis for arriving at the present value of the physical property.

The following schedule giving additions and retirements from June 30, 1918 to March 31, 1940, together with the amount of tangible property on the basis of original cost at the end of each year may be of interest, particularly as an indication of the relative age of the properties:

	Additions during year Completed Construction	Retirements during year	Balance close of year
At June 30, 1918			$1,468,424
July 1 to Dec. 31,1918	$ 18,929		1,487,353
year 1919	24,849		1,512,203
1920	29,756		1,541,959
1921	140,674	$ 2,491	1,680,143
1922	111,959	19,248	1,772,854
1923	115,285	14,091	1,874,047
1924	303,818	18,708	2,159,157
1925	714,644	32,343	2,841,459
1926	1,084,937	26,015	3,900,381
1927	722,887	20,259	4,603,009
1928	626,570	94,643	5,134,936
1929	308,280	82,311	5,360,905
1930	489,766	83,345	5,767,327
1931	102,302	7,331	5,862,297
1932	9,463	5,505	5,866,255
1933	8,280	2,525	5,872,010
1934	17,274	598	5,888,685
1935	24,706	32,015	5,881,376
1936	80,081	7,232	5,954,225
1937	127,657	22,831	6,059,051
1938	45,287	29,718	6,074,619
1939	64,535	5,862	6,133,292*
Jan.1,1940 to Mar.31,1940	6,689	-	6,139,982
Total	5,178,628	507,071	

Physical property at March 31, 1940 (completed constr.)	6,139,982
Work in progress	4,560
Total tangible property	$6,144,542

* - Excludes $1,051 work in progress at the end of the year.

It will be noted that between July 1, 1918 and March 31, 1940, gross additions mounted to $5,178,628 which is equivalent to almost 85% of the total original cost value of tangible property as of March 31, 1940. Retirements during this same period have amounted to $507,071 and it appears, therefore, that not much more than $1,000,000 of the present property value represents property built prior to 1919. It will be noted, also, that most of the gross additions were made subsequent to 1923 and that a particularly heavy construction program was followed between 1924 and 1930.

We have made an analysis of the overheads charged to construction from 1919 down to March 31, 1940. Such overheads represented engineering and construction charges by the Baehr Organization, Inc., or its predecessor, and amounted to $475,044. In addition, there were some charges allocated by North Shore Gas Company, but these are negligible as they amounted to about $4,800. During the period covered by the above charges, the construction as shown in the schedule above totaled $5,159,699, and therefore the overhead charges were equivalent to 10.2% of direct construction costs. This is a reasonable percentage, in our opinion, and it is not necessary to adjust the property and plant account for any excessive overheads.

We are therefore of the opinion that the undepreciated original cost of the present tangible property may be taken at about $6,144,000. On the basis of a recent inspection of the physical properties and from a study of the history of the property and plant account, it appears to us that the present condition of the property on a composite basis may be taken at about 81 per cent, and this results in a depreciated original cost value of about $4,975,000. Incidentally, the book depreciation reserve balance which amounted to $1,251,159 as of March 31, 1940, is equivalent to about 20-1/2 per cent of the original cost of the tangible property and is therefore adequate, in our opinion.

Coke Company. The balance sheet of North Shore Coke & Chemical Company at March 31, 1940, carried the gross book value of fixed property at $3,895,435, while the depreciation reserve of the same date totaled $625,252, making the net book value of fixed property $3,270,183. The company has not restated its property and plant account on the basis of original cost as it apparently feels that it is not subject to the jurisdiction of the Illinois Commerce Commission and such restatement of property value is not required in order to comply with the Uniform System of Accounts prescribed by the Commission. However, from such information as is available, we made a study of the property and plant account, and the results of our study are summarized below.

The property and plant account contains the following items:

> Plant site and preliminary services carried at valuation placed thereon by Board of Directors in the year 1927. The Company paid $1,000 cash and issued $250,000 par value 7% Cumulative Preferred Stock and $199,000 par value Common Stock to William A. Baehr for the land and preliminary services. The Board of Directors, at a meeting held February 21, 1927, declared the property and services so received to be of a value in excess of $750,000 thereby constituting payment in full for the stock issued and also constituting an additional payment of $300,000, which it directed to appear on the books of the corporation as paid-in surplus. Mr. Baehr

sold the preferred stock which he received in this transaction and made a contribution to the company of the proceeds from such sale less the cost of the plant site to him. This contribution, in amount of $102,160 was not applied as a reduction of the property values but was credited to donated surplus where it appears in the balance sheet - - - - - - - $750,000

Other property, plant and equipment carried at cost, such cost including engineering, supervision, interest, amortization of debt discount and expense, taxes and insurance during construction. Included herein are charges by the William A. Baehr Organization (a proprietorship)and the William A. Baehr Organization, Inc. (an affiliated company and successor to the business of William A. Baehr Organization) for engineering services and supervision during construction of the company's coke plant, such charges being sufficient to allow those organizations substantial profits on their services. Major portions of the profits so derived were contributed back to the company. These contributions, in total amount of $334,546 were not applied as reductions of the property values but were credited to donated surplus where they appear in the balance sheet - - - - - - $3,145,435

Carrying value as shown by balance sheet of March 31, 1940 - - - - - - - - - - - - - - - - - - $3,895,435

As we interpret the above notations, which in substance have been certified to by Arthur Young & Company, and from other available information which we have obtained in order to bring the matter down to date, the situation with regard to the Coke Company's property and plant account is as follows:

The original cost of the plant site to Mr. Baehr was $147,840 and in effect, therefore, the land account contains a write-up of $602,160. As will be noted from the above notation, Mr. Baehr donated back to the company $102,160, which was credited to Donated Surplus, and in addition $300,000 of the above difference was credited to Paid-in surplus. The balance of the write-up is accounted for by the common capital stock of $200,000. As previously noted, this write-up is still in the present property and plant account and therefore, for the purposes of an original cost study, it should be eliminated from the present carrying value of the Land and Preliminary Services Account. Including some subsequent expenditures, this account is now carried at $771,056 and by deducting the aforementioned write-up of $602,160, the original cost of the plant site becomes $168,896. It is worth noting in this connection, however, that because of its strategic location with respect to harbor facilities, and other factors, this plant site, if it were to be sold for industrial purposes at the present time, would undoubtedly bring in a price considerably in excess of its original cost. For the purpose of the present analysis, however, we shall use the original cost figure of $168,896 for this item.

The other items of property and plant are carried at original cost, except for the engineering fees and construction profits of the Baehr Organization, and it becomes necessary, therefore, to examine these charges. The total charges of the Baehr Organization amounted to $490,165 from May 1, 1927 to the end of March, 1940. Of this amount $453,308 represents the charges covering the initial construction period of the plant, (May 1, 1927 to June 1, 1928) while the balance represents charges made subsequent to that time. As previously noted, Mr. Baehr contributed back to the company $334,546 of such charges. This contribution was credited to the donated surplus of the company, but was not applied as a reduction to the plant account. Incidentally, the charges as a whole are spread among the various property and plant account primary items, and are not segregated. It appears to us, therefore, that the above contribution of $334,546 should be deducted from the present gross book value of fixed property as a step toward arriving at original cost. After deducting this item, there would still remain in the property and plant account $155,619 of engineering fees and construction overheads paid to the Baehr Organization. The direct construction costs of the property, excluding land, and exclusive of overheads and construction profits, amounted to $2,408,152 and the above-mentioned figure of $155,619 for charges paid to the Baehr Organization is equivalent to less than 6-1/2% of the direct construction cost. In our opinion, this is a reasonable percentage and does not require a downward revision.

After an elimination of the various items discussed above, the property and plant account of the Coke Company as of March 31, 1940, is as follows:

Land and Preliminary Services at Cost		$ 168,896
Direct Construction Cost (Excluding Overheads & Profits)		2,408,152
Total Direct Cost		2,577,048
Overheads		
Baehr Construction Charges	$155,619	
Interest During Construction	198,397	
Amortization	12,525	
Insurance	2,575	
Taxes	3,212	
Miscellaneous	5,854	
Organization	3,488	381,670
Total		$2,958,718

It will be noted that in addition to the allowance of $155,619 representing what appears to be a reasonable engineering and construction supervision fee of the Baehr Organization, the property and plant account contains other overheads such as interest during construction, amortization, taxes during construction, insurance and other miscellaneous items. The interest during construction amounted to $198,397. The project was originally financed partly by means of a 20-year 6% bond issue dated March 1, 1927, which is prior to the beginning of construction on the plant, and partly by the issuance of 7% preferred stock. From a discussion of the subject with the auditor of the Baehr Organization, we understand that the interest charged to construction represents the net interest actually incurred after a credit of $60,142 received as interest from the bank on the deposited cash, which was drawn upon on the basis of engineers' certificates as the construction work progressed. We also understand that the other overhead items listed above represent actual amounts incurred in connection with the construction of the project. The above charges are based on a 15-month construction period, and while the actual construction work took only 12 months, it will be remembered that the construction money was raised about three months prior to the beginning of actual construction.

It is of interest to note that the total overhead expenditures of $381,670 listed above are equivalent to 14.8% of the total direct cost of $2,577,048, and this appears to be a reasonable over-all percentage in the light of the conditions under which the project was constructed.

The gross additions to the coke oven plant subsequent to June 1, 1928, amounted to $514,707, while the retirements during the same period totalled $91,327, resulting in net property additions of $423,380. Gross additions and retirements are shown by years in the following tabulation:

	Additions	Retirements
7/1 to 12/31/28	$219,899	$16,017
Year 1929	-	-
" 1930	88,704	12,000
" 1931	2,882	96
" 1932	9,622	1,558
" 1933	21,558	34,690
" 1934	1,037	2,415
" 1935	24,645	1,915
" 1936	7,182	9,866
" 1937	113,163	503
" 1938	4,981	6,542
" 1939	17,512	5,725
1/1 to 3/31/40	3,522	-
	$514,707	$91,327

The relatively large construction expenditure of $113,163 made in 1937 represents principally the construction of the producer gas plant which was placed in operation in September of that year, as previously mentioned. It will be noted that about 86% of the present property and plant tangible value dates back to 1928, while the balance is accounted for by the subsequent net additions, particularly those made in 1930 and 1937.

The foregoing analysis points to the conclusion that the estimated undepreciated original cost of the Coke Company's property is approximately $2,958,000. From observations made during a recent inspection of the property and from the history of the property and plant account, we are of the opinion that the present condition of the property is in the neighborhood of 84%. This results in a depreciated original cost estimate of about $2,475,000, and this is the figure which we shall use for the purposes of the present analysis.

Earning Power Considerations. As shown above the depreciated original cost estimates of the properties under investigation are $4,975,000 for the Gas Company, and $2,475,000 for the Coke Company, giving a combined figure of $7,450,000 for the purposes of the present analysis. These figures are not intended to be a criterion of possible rate-making values as in a rate case some consideration might be given to reproduction cost new, less depreciation, and an allowance might be made for intangibles such as going concern value, in addition to the customary allowance made for working capital and materials and supplies, which would result in a rate base in excess of the above estimates.

The sound value of manufactured gas properties, however, is often limited by lack of sufficient earning power at competitive rates, and this has been characteristic of the industry as a whole. Under such conditions rate-making value is of academic interest only. Therefore it is important at this juncture to examine the relative earning power of the two properties under investigation, and for this purpose we used the net earnings for the past five years after making certain adjustments.

The reported earnings of the Gas Company for the years prior to 1939 were adjusted upward in order to reflect savings in the purchased gas costs in accordance with the present terms of the gas purchase contract with the Coke Company which placed in effect a lower price schedule beginning with June 1, 1938. The reported earnings of the Coke Company were adjusted downward correspondingly. In making this adjustment, we assumed that the present gas contract is fair to both companies. In arriving at adjusted net earnings, we also eliminated the profits included in the Baehr Organization charges to these companies, thereby reducing such charges to actual cost throughout the 5-year period. We also made an upward adjustment to the depreciation charges of the Coke Company in accordance with our ideas as to the annual depreciation requirements of its property, and finally we adjusted the income taxes of the two companies in order to reflect the above changes in the income account.

The adjusted net operating income figures for each company are shown in the following tabulation. In addition, we are showing in the table the annual rate of return on the respective depreciated original cost property values arrived at above ($4,975,000 for the Gas Company's property, and $2,475,000 for the Coke Company's property). We are also giving similar figures for both properties combined, which show the results of operation had these properties been merged and operated as one company during the 5-year period under review. The tabulation is as follows:

	1939	1938	1937	1936	1935	5-Year Average
North Shore Gas Co.						
Adj. Net Oper. Income	$191,753	$184,741	$183,609	$258,114	$264,493	$216,542
% Return on Property	3.85	3.71	3.69	5.18	5.32	4.36
North Shore Coke & Chemical Company.						
Adj. Net Oper. Income	$151,502	$174,993	$325,887	$243,125	$ 95,804	$198,262
% Return on Property	6.13	7.07	13.15	9.83	3.87	8.03
Combined Properties						
Adj. Net Oper. Income	$345,259	$364,091	$518,059	$509,920	$372,537	$421,973
% Return on Property	4.63	4.88	6.97	6.95	5.02	5.66

The above table shows that under existing conditions the Gas Company is incapable of earning an adequate return on the depreciated original cost of its property as such rate of return on the above adjusted basis would have varied from a minimum of 3.69% in 1937 to a maximum of 5.32% in 1935, with a 5-year average of 4.36%. The depreciated original cost of the Gas Company's property is equivalent to about $184 per customer, while the corresponding undepreciated figure is $227 per customer. These are relatively high average investment figures, particularly in view of the fact that the company is not self-sufficient from the standpoint of production facilities, and therefore has to carry the fixed charges on a portion of the Coke Company's plant investment in the price paid for purchased gas. This situation, however, is not due to inflated property values, but it is the result of the low customer density per mile of transmission and distribution main previously discussed. The available data and time did not permit an analysis of the rate of return earned in each of the operating districts and communities served. It is obvious, however, that a very low rate of return is being earned in the territory west of the North Shore suburbs, as well as in the territory north and west of Waukegan. As a matter of interest, the principal transmission line extensions into this thinly populated area made by the company between 1924 and 1930 required a capital expenditure of over $250,000. The basic remedy for improving the rate of return in these sparsely settled areas is an increase in customer density through future population growth.

The adjusted earnings figures shown in the foregoing table indicate that the Coke Company would have earned a reasonable rate of return on the estimated depreciated original cost of its property in 1939 and 1938, while the good coke market enjoyed in 1937 and 1936 would have resulted in high rates of return of 13.15% and 9.83% respectively. On the other hand, in a poor coke year such as 1935, the Coke Company would have earned a return of only 3.87%. The 5-year average net operating income would have been equivalent to a rate of return of about 8% on the estimated depreciated original cost of the property, and it might, therefore, be argued that the gas prices specified in the present gas sales contract are not fair to the Gas Company. It should be noted, however, that after allowing for the necessary working capital and materials and supplies, this return is reduced to about 6.7%. Furthermore, even if, for the sake of argument, the Coke Company's 5-year average rate of return were to be reduced to 6%, and the difference were to have been passed on to the Gas Company by way of a lower gas price, the corresponding 5-year average net earnings of the Gas Company would have been equivalent to a rate of return of only 4-3/4% on the depreciated original cost of its property.

The above analysis shows that, at least under existing conditions, the Gas Company's property is hampered by lack of sufficient earning power, whereas the Coke Company would have been capable of earning an adequate rate of return on its property even after downward adjustments in its earnings such as those used in the above discussion. When considering both properties as a single operating unit, we find that the over-all rate of return on the estimated original cost of the properties involved would have varied from a low of 4.63% in 1939 to a high of 6.97% in 1937 with a 5-year average rate of return of 5.66%. This shows that particularly in relatively good coke market years, the properties, if they were to be combined into a single corporate structure, would possess a much better earning power than that now obtained for the Gas Company alone, and this earning power would be further improved as the customer density increases and the load-building activities progress in the future. Under such conditions we would not suggest a reduction in the property valuation estimates arrived at above for over-all capitalization purposes, whereas under the present set-up the depreciated original cost estimate found for the Gas Company's property would have to be scaled down when considered from the standpoint of earning power support upon which to base a separate capital structure for that company.

In conclusion, it appears to us that it is highly desirable to merge the two companies into a single corporate structure, as this would provide a much sounder basis for a refunding operation and for a better over-all capital structure. The above analysis points to the further conclusion that in view of the earning power limitations prevailing under existing conditions, whereby the rate of return on the estimated depreciated original cost of the combined properties would have amounted to only 4.63% in 1939, and to an average of 5.66% for the past 5-year period, even the merged company would require a very conservative capital structure, particularly from the standpoint of funded debt if the best long-term solution to the problem is to be achieved. The advisability of a merger will be discussed further from other angles in subsequent sections of this report.

OTHER ASSETS

Gas Company. At March 31, 1940, current assets of North Shore Gas Company amounted to $570,205 compared with current and accrued liabilities of $254,961, giving the company net working capital of $315,244. The current assets and current and accrued liabilities are itemized below:

Current Assets:		
Cash		$ 87,882
Notes and Bills Receivable		520
Accounts Receivable	$308,518	
Less Reserve	20,712	287,806
Interest and Dividends Receivable		16,403
Materials and Supplies		99,464
Restricted Funds		150
Debt Service Fund		2,980
U. S. Treasury Bills		75,000
Total Current Assets		$570,205
Current and Accrued Liabilities:		
Accounts Payable		38,049
Consumers' Deposits		31,477
Stock subscription cancelled		633
Accrued interest on funded debt		48,760
Accrued interest on consumers' deposits		15,944
Taxes		58,870
Occupational Tax		2,076
North Shore Coke & Chemical Company		59,152
Total Current and Accrued Liabilities		$254,961

A further explanation of some of the major items listed above is as follows:

The free cash, plus the $75,000 U. S. Treasury Bills, totalled $162,882, and this compares with an average month's operating expenses and taxes for 1939 of $96,365.

The accounts receivable are divided as follows:

Consumers - Gas Accounts	$150,067
Consumers - Merchandise Accounts	157,772
Residuals	393
Miscellaneous	285
Total	$308,517

The reserve for uncollectible accounts of $20,712 is considered by the management to be adequate. During the calendar year 1939, additions to this reserve were made in the amount of $7,488, and $6,766 of uncollectible accounts were charged off. At December 31, 1939, only $17,231, or approximately 12% of the accounts receivable from gas consumers were more than thirty days old. At the same date, $21,469, or approximately 12½% of the accounts receivable from merchandise customers were more than thirty days old. Accounts receivable from gas consumers at March 31, 1940, exceeded February gas sales by approximately $8,500, indicating that the company is not confronted with any unusual delinquent account problems.

Materials and supplies totalling $99,464 include $46,793 of merchandise in stock. This compares with merchandise sales for the first quarter of 1940 of $33,385.

Consumers' deposits are divided between $27,456 which bear interest at 6% and $4,021 which bear interest at 5%. The rate of interest on meter deposits was reduced from 6% to 5% on new accounts since May 20, 1939. The trend in the industry has been towards lower rates on meter deposits and their refund as rapidly as credit conditions permit. It would seem to us that the company should give serious consideration to refunding the deposits to such customers as have established their credit, as this would reduce interest charges and improve public relations.

The $59,152 payable to North Shore Coke & Chemical Company, carried on the Gas Company's balance sheet under intercompany accounts, is one month's gas purchases from that company.

The remaining items in the above accounts are largely self-explanatory. It is to be noted that no unbilled revenue is carried on the balance sheet.

Net working capital of $315,244 as of March 31, 1940 was equivalent to $11.60 per meter and compares with an average month's operating revenues for 1939 of $121,700, and with an average month's operating expenses of $96,365. This indicates that the company is in good working capital position.

Other assets of the company were relatively small and consisted principally of $46,949, representing appliances installed on customers' premises under rental-purchase contracts, less a reserve of $3,000 for possible losses on repossession of this equipment. The company follows the policy of installing water heaters and conversion burners in the customers' premises under a rental-purchase plan which permits the customer to use the installation on trial, meanwhile paying a monthly rental for its use. Should the customer contract to buy the installation, the full amount of the rental paid is credited on the sales price. Prior to June 1, 1937, such trial deals were treated as merchandise sales, but at that date this was changed and they were transferred from current accounts receivable to this special account. In order that no profit would be taken upon the books of the company until the customer has elected to purchase the appliance, the cost only of the installation has been charged to this account and the monthly rentals paid credited thereto.

The company owns two shares of capital stock of the First National Bank of Waukegan, and eight shares of capital stock of the First Lake County National Bank at Libertyville at an aggregate cost of $360.

In addition, the balance sheet showed prepaid items of $13,198 representing insurance, rents, etc.

Under deferred charges, the balance sheet contains an item of $26,006 which represents expenses incurred in 1931 in connection with a natural gas study made in 1931, and no portion of this item has as yet been amortized.

At March 31, 1940, North Shore Gas Company owned $1,576,250 principal amount of 5-year, 4% debentures of North Shore Coke & Chemical Company, due January 1, 1942. These debentures were purchased from the North Shore Coke & Chemical Company out of the proceeds of the $5,100,000 North Shore Gas Company and North Shore Coke and Chemical Company Joint First Mortgage 4% Bonds, Series A, due January 1, 1942. The debentures are identical as to maturity, rate of interest, prepayment provisions and debt service fund with the aforementioned Joint First Mortgage Bonds, and are designed to put the Gas Company in funds with which to take care of one-third of such first mortgage bonds. While these debentures are carried on the company's books at par, they were purchased at 97 and the 3% discount was charged to unamortized debt discount and expense. Pursuant to the agreement dated January 1, 1937, between the two companies, the debentures are being retired by the debt service fund at par. The original amount purchased by the company was $1,700,000. Inasmuch as these debentures are an offsetting item, we are not including them in this valuation.

Unamortized debt discount and expense amounted to $94,642 at March 31, 1940, of which item $48,750 is equivalent to the discount as yet unrealized on the investment in the 4% Debentures of North Shore Coke & Chemical Company. This discount is credited as the debentures are retired. The balance of debt discount and expense is being amortized over the life of the Joint First Mortgage Bonds.

In summary, the value of the company's net assets other than physical property may be taken at about $359,000 for the purposes of the present analysis, and this, added to the depreciated original cost of the physical property of $4,975,000 previously arrived at above, results in a total net asset value of $5,334,000.

Coke Company. The March 31, 1940 balance sheet of North Shore Coke & Chemical Company shows total current assets of $682,392, compared with total current and accrued liabilities of only $68,835, thereby resulting in net working capital of $613,557. The current assets and current and accrued liabilities are itemized below:

Current Assets:	
Cash	$ 35,355
U. S. Treasury Bills	250,000
Accounts Receivable, less reserves	33,073
Interest and dividends receivable	5,144
Materials and Supplies	299,025
Repayments	640
Receivable from North Shore Gas Co.	59,151
Total Current Assets	$682,392
Current and Accrued Liabilities:	
Accounts Payable	14,387
Taxes Accrued	38,198
Interest Accrued	16,250
Total Current and Accrued Liabilities	$ 68,835

The above tabulation indicates that this company was in an excellent current position at March 31, 1940, as cash on hand, plus $250,000 U. S. Treasury Bills totalled $285,355 which compares with an average month's operating expenses of only $75,878 for 1939.

Accounts receivable totalled $33,948 against which a reserve of $875 was carried. The company is currently selling its coke through Pickands, Mather & Company under an arrangement whereby this agent receives a 5% commission on the net selling price to the company after deducting freight charges, and the agent stands all uncollectible accounts. The other by-products are sold direct by the company through a relatively limited number of accounts and excellent collections are being experienced. The above reserve covers in full certain old accounts rather than current accounts and appears to be adequate under the selling arrangements described above.

Materials and supplies of $299,025 were accounted for as follows:

Coke	$106,778
Breeze	1,644
Producer fuel	3,358
Tar	840
Sulphate	454
Sulphate paste	2,272
Production Stock	179,214
Deferred Production Stock	105
Miscellaneous Stock	4,360
Total	$299,025

The coke inventory is valued at the arbitrary figure of $4.50 per ton as compared with an average price of approximately $6.35 per ton actually realized during 1939. The company had on hand 23,728 tons of coke at March 31, 1940. Production stock consisted primarily of 3 different coals, valued at cost to the company, including expenses of unloading the coal. The inventory of coal for carbonization was reduced from $358,814 at December 31, 1939 to $177,921 at March 31, 1940, and the inventory of coke was reduced from $134,407 to $106,778 during the same period. Total inventories declined from $504,652 to $299,025 during this period. This is a seasonal decline in inventory and the resulting gain in cash, together with a portion of cash on hand, has been invested in U. S. Treasury Bills. It will be remembered that the company brings in its coal supply during the navigation season over the Great Lakes.

The remaining items listed under Current Assets and Current and Accrued Liabilities in the above tabulation are largely self-explanatory and need no further comment.

The March 31, 1940 balance sheet of the Coke Company includes the following items:

Common Stock (60%) S. W. Shattuck Chemical Company	$ 28,992
Common Stock (100%) North Continent Mines, Inc.	44,754
Note Receivable - S. W. Shattuck Chemical Co.	11,647
Interest Receivable - North Continent Mines, Inc.	3,165
- S. W. Shattuck Chemical Co.	1,980
Open Account - S. W. Shattuck Chemical Co.	106,069
- North Continent Mines, Inc.	211,021
Total	$407,628

The foregoing items represent an outside investment made by the Coke Company in these companies. The investment was originally made in 1934 and involved an initial cash outlay of about $134,887. Subsequent advances, however, plus accumulated accrued interest brought this investment to the above figure of $407,628 as of

March 31, 1940. The actual net cash invested by the Coke Company or realized during each calendar year in the above two enterprises is as follows:

Year	The S. W. Shattuck Chemical Company	North Continent Mines, Inc.	Total
1934	$56,516	$78,051	$134,567
1935	22,199	59,864	82,063
1936	9,717	59,880	69,597
1937	576	-	576
1938	9,569*	6,672	2,897*
1939	45,188	7,268*	37,920
3 Mos. - 1940	12,590*	-	12,590*

* - Denotes cash received.

The above figures show that from a cash standpoint these enterprises have imposed a considerable burden on the Coke Company as the actual cash outlays during the above period amounted to $324,723 whereas the cash withdrawals totalled only $15,487.

We, of course, are not in a position to give an expert opinion on the value of these investments as they are outside of the public utility field. The following comments, however, pertaining to the history and operations of these companies may be of interest.

The property of the North Continent Mines, Inc., prior to the purchase of its common stock by the Coke Company was owned by Mr. J. Seward Potter, who is now vice president of the S. W. Shattuck Chemical Company and present holder of 40% of its common stock.

The S. W. Shattuck Chemical Company, with plant located in the City of Denver, processes rare metal ores including molybdenum, uranium, tungsten, and radium. Its present business is primarily molybdenum products and iron vanadiate. The company purchases concentrates from producers and further refines them, selling the oxides, etc. to various manufacturers. The company's sales for the past six years have been as follows:

1934	$ 38,037
1935	108,640
1936	149,413
1937	289,033
1938	290,608
1939	475,778

The property of the North Continent Mines, Inc., located in San Miguel County, southwestern Colorado, is in that section of the United States where carnotite and vanadium ores are found exclusively. The company owns various claims which have been added to from time to time, reported to be adequate to supply its operations for many years. The principal product is Vanadium Pent-oxide which is crushed in its mill, sized and packaged, and shipped to the purchasers, primarily S. W. Shattuck Chemical Company, Denver. In addition, the company produces radium slimes, which are currently being stored because of the present price of radium, resulting from the recent Canadian discoveries. At the time of the Coke Company's purchase, radium was expected to be a profitable phase of this operation. The company's sales for the past six years have been almost entirely to S. W. Shattuck Chemical Company and are as follows:

1934	$ 4,902
1935	34,961
1936	59,316
1937	52,126
1938	157,348
1939	230,827

The original intention was to treat the ore of the North Continent Mines, Inc. with ammonium sulphate from the plant of the Coke Company, but this process was found to be uneconomical. However, we gather that the investment was made on its merits anyway, although the Coke Company's attention had been drawn to the matter initially as a market for one of its by-products.

North Continent Mines, Inc. shows an earned deficit on its balance sheet of $9,572. However, its profit and loss statement for the calendar year 1939 shows net income of $5,508. The S. W. Shattuck Chemical Company shows an earned deficit on its balance sheet of $30,214. However, this company earned a net profit for 1939 of $7,155. The foregoing profits of both companies were after accruing interest on the indebtedness to the Coke Company.

William A. Baehr Organization, Inc., expresses the opinion that both companies should continue on an increasingly profitable basis, and, barring unforeseen developments, will not be the financial burden in the future that they have been in the past.

As previously mentioned, the total investment of the Coke Company in North Continent Mines, Inc., as of March 31, 1940, exclusive of any reserve for losses, was $258,940, which compares with 1939 net earnings of $17,060 available for interest and dividends. Such earnings are equivalent to a return of 6.6% on the Coke Company's investment in this enterprise. These earnings were available to the Coke Company, $11,552 as interest on the advance, and $5,508 as equity earnings on the common stock. Similarly, the total investment of the Coke Company in S. W. Shattuck Chemical Company was $148,687 which compares with 1939 earnings of $10,006 applicable to such investment. These earnings were available to the Coke Company, $6,713 as interest and $4,293 as equity earnings on 60% of the common stock. The combined earnings of the two enterprises applicable to the Coke Company's investment of $407,628 were equivalent to a return of 6.6% on such investment, but as will be noted from a preceding tabulation, the Coke Company drew down only $7,268 from the North Continent Mines, Inc., and on the other hand, it put in an additional $45,188 in the S. W. Shattuck Chemical Company in 1939. Whether or not the future operations and cash requirements of these two enterprises will be such as to permit cash payments to the Coke Company, or whether or not the Coke Company will be required to advance additional money to them, we are not in a position to state, but, during the past several years, these enterprises required substantial advances of money on the part of the Coke Company, as previously noted.

Judging from the present earnings trend, these enterprises could conceivably become quite profitable in the future. It is our opinion, however, that investments of this type have no place in a public utility situation, and we would prefer to see them disposed of ultimately when the proper opportunity presents itself. Accordingly, we have made no attempt to evaluate these holdings, being of the opinion that they are worth only what they would bring in liquidation, and such liquidation is a practical problem for the management. The worth of these holdings would appear to be largely a matter of their geological importance to potential buyers, a matter on which we are not prepared to give an opinion. Under the circumstances, we would prefer to see these holdings liquidated, and the proceeds of their sale used to reduce the capital charges of the Coke Company from the standpoint of long-term policy.

Another asset appearing on the Coke Company's balance sheet is funds in closed banks in the amount of $4,726, which appears to be amply covered by a reserve of $4,064, inasmuch as the company is receiving some recovery from time to time on this item.

The balance sheet at March 31, 1940, also showed unamortized debt discount and expense in the amount of $68,311, which represents the unamortized balance of debt discount and expense on one-third of the Joint First Mortgage 4% Bonds, Series A, due January 1, 1942. The balance sheet also showed a deferred debit item of $330,000 which represents the discount on the 7% preferred stock.

In conclusion, the net assets of the Coke Company other than physical property may be taken at a value of approximately $613,000 for the purposes of the present analysis, and this, together with the estimated depreciated original cost of $2,475,000 previously arrived at for the physical property, makes the total net value of all assets $3,088,000. This, however, excludes the company's investment in S. W. Shattuck Chemical Company and North Continent Mines, Inc., upon which we are not in a position to place a value and which could conceivably be disposed of at a substantial price.

EARNINGS

The accompanying tables show comparative income accounts of the Gas Company and the Coke Company respectively for the calendar years 1930 - 1939 inclusive, and also for the twelve months ended March 31, 1940. A third table shows a corresponding combined income account for the companies after eliminating intercompany transactions and this table, in effect, presents the operating results as though the two systems were operated as one company.

In view of the many changes which have taken place during the period under review, the individual income accounts will not be analyzed in detail at this time, but will be treated more fully on a combined basis under subsequent headings in this report. The following comments, however, relating to the general trend experienced, may be of interest.

It will be noted that in the case of the Gas Company the revenue from gas sales declined without interruption between 1930 and 1935. This decline amounted to about 25%. The gas revenues, however, resumed their upward trend after 1935 and from there on to the year ended March 31, 1940, they showed an increase of about 12% which is a better recovery than that experienced by many other manufactured gas companies. It should be noted, however, that the revenue for the latest 12-month period was still 16% below that obtained in the 1930 peak year. The volume of gas sold declined from 1,465,462 M.c.f. in 1930 to 1,161,803 M.c.f. in 1934, a drop of 20-1/2%. The subsequent increase between 1934 and 1939 amounted to 33%, and it is noteworthy that the gas sales of 1,541,467 M.c.f. in 1939 exceeded those for the 1930 peak year by about 5½%. The customers served decreased from a predepression peak of 25,150 reached in 1930 to 23,713 in 1933, a decline of 5-3/4%, but a substantial increase was experienced subsequently to a new peak of 27,107 customers at the end of 1939. The following pertinent statistics are of interest in connection with the trend experienced by the Gas Company during the period under review.

Year	No. of Meters In Use (End of Year)	Average Annual Sales per Meter M.c.f.	Average Annual Sales per Meter Revenue	Average Revenue per M.c.f. Sold
1930	25,150	58.3	$71.10	$1.22
1931	24,215	57.2	70.30	1.23
1932	23,784	56.0	67.00	1.20
1933	23,713	50.7	60.10	1.87
1934	24,252	47.9	55.10	1.15
1935	25,059	48.7	53.50	1.10
1936	25,717	49.7	53.20	1.07
1937	26,413	51.9	51.90	1.00
1938	26,565	54.8	52.90	0.97
1939	27,107	56.8	52.90	0.93

It will be noted that the average price of all gas sold declined from $1.23 in 1931 to $0.93 in 1939, or 24½%. It is encouraging

NORTH SHORE GAS COMPANY--Comparative Income Account

	Year Ended March 31, 1940	Calendar Year 1939	Calendar Year 1938	Calendar Year 1937	Calendar Year 1936	Calendar Year 1935	Calendar Year 1934	Calendar Year 1933	Calendar Year 1932	Calendar Year 1931	Calendar Year 1930
Operating Revenue:											
Gas sales -											
Residential and commercial	$ 1,411,731	1,375,752	1,357,815	1,310,256	1,300,138	1,269,633	1,287,118	1,370,237	1,531,885	1,630,189	1,701,549
Industrial	63,382	59,271	45,548	57,474	51,179	47,660	32,935	32,669	36,466	44,362	55,189
Public street and highway lighting	2,268	2,268	2,215	2,159	2,116	2,118	2,116	2,105	2,467	3,904	4,382
	$ 1,477,381	1,437,291	1,405,579	1,369,890	1,353,488	1,319,411	1,322,169	1,405,011	1,570,818	1,678,455	1,761,12[illegible]
Other gas revenue -											
Customers' forfeited discounts and penalties	13,599	14,175	15,309	18,562	18,594	19,859	19,681	21,519	22,260	21,481	23,067
Servicing customers' installation	9,800	8,960	9,446								
	$ 1,500,780	1,460,426	1,430,334	1,388,452	1,372,025	1,339,270	1,341,851	1,426,530	1,593,078	1,699,937	1,784,18[illegible]
Operating Expenses and Taxes:											
Gas purchased	$ 672,330	568,250	618,103	601,901	517,042	515,064	566,569	512,304	502,253	405,523	628,63[illegible]
Water gas production -											
North plant	111,845	85,408	52,286	88,441	127,553	119,814	84,369	73,230	119,151	225,379	168,114
South plant	8,344	6,884	9,268	9,789	10,329	7,105	6,645	8,986	11,086	11,466	11,842
Deerfield holder operation	17,856	17,400	18,107	17,375	15,667	15,065	15,548	15,645	19,432	22,991	25,07[illegible]
Transmission expense	50,061	45,647	43,962	118,609	106,165	90,811	107,266	119,393	106,596	116,995	130,47[illegible]
Distribution expense	97,678	92,034	84,534								
Customers' accounting and collection expenses	66,211	65,340	65,658	62,067	57,725	58,948	63,657	63,491	61,255	68,013	71,584
Sales promotion expense	66,775	68,489	66,833	56,301	9,845	23,078	40,919	46,510	38,998	38,169	24,88[illegible]
Administration and general expenses	97,568	96,580	100,118	105,877	86,390	92,656	117,010	122,758	152,737	147,413	118,594
Taxes (federal income excluded)	100,770	100,864	94,288	100,059	101,387	81,696	59,323	97,585	55,500	51,000	49,00[illegible]
Federal income taxes	11,599	11,884	2,028	-	8,868	6,901	-	12,946	33,019	35,123	34,46[illegible]
	$ 1,300,235	1,156,386	1,156,130	1,157,442	1,039,975	1,011,345	1,072,505	1,032,791	1,100,031	1,122,076	1,282,65[illegible]
Utility operating income before provision for depreciation	$ 300,545	304,040	275,203	231,010	332,049	327,925	269,345	393,739	493,046	577,861	521,527
Less depreciation provided	112,680	112,287	111,017	109,908	108,662	108,159	107,817	107,631	107,834	106,435	102,542
Utility operating income after allowance for depreciation	$ 187,865	191,753	164,186	121,101	223,386	219,767	161,528	286,107	385,212	471,426	418,984
Non-operating Revenues:											
Miscellaneous interest	$		1,495	989	26,906	28,021	32,668	39,922	43,128	28,695	13,991
Miscellaneous rental	225	253	809	441	506	528	526	637	798	939	1,50[illegible]
Interest on North Shore Coke & Chemical Co. debentures	65,525	65,786	66,794	62,095							
Miscellaneous non-operating revenue	349	644	1,010	2,001	3,052	1,968	1,117	710	844	1,715	3,747
	$ 66,099	66,683	70,108	65,525	30,465	30,517	34,312	41,270	44,771	31,349	19,24[illegible]
Gross Income	$ 253,964	258,437	234,296	186,626	253,852	250,285	195,841	327,377	429,984	502,776	438,230
Deductions:											
Interest on funded debt	$ 192,171	192,941	199,376	201,839	194,575	198,700	199,141	200,000	200,000	194,934	150,000
Miscellaneous interest deductions	2,177	2,177	1,876	2,147	1,850	2,552	2,555	2,619	2,992	3,075	3,271
Normal tax paid at source				824	2,020	2,077	1,974	2,062	2,110	3,376	926
Amortization bond discount and expense	26,469	26,941	30,317	31,067	24,542	22,396	22,396	22,396	22,396	21,666	13,632
Interest during construction (credit)			(108)	(248)	(632)	(110)	(40)	(199)	(141)	(1,854)	(3,137)
Loss on sale of securities								687	1,375		
Provision for loss on Lake Forest syndicate						3,177					
Provision for losses on cash in closed banks					3,000						
	$ 220,818	222,060	231,461	235,660	225,355	228,793	226,027	227,566	228,732	221,198	164,691
Net Income	$ 33,146	36,376	2,834	(49,024)	28,496	21,492	(30,186)	99,811	201,251	281,577	273,538
Less dividends:											
On 7% preferred stock							27,956	160,720	195,259	203,040	204,748
On common stock									210,000	210,000	
Balance after dividends	$ 33,146	36,377	2,834	(49,024)	28,496	21,492	(58,142)	(60,909)	([illegible]	([illegible]	

NORTH SHORE COKE & CHEMICAL COMPANY
Comparative Income Account

	Year Ended March 31, 1940	Calendar Year 1939	Calendar Year 1938	Calendar Year 1937	Calendar Year 1936	Calendar Year 1935	Calendar Year 1934	Calendar Year 1933	Calendar Year 1932	Calendar Year 1931	Calendar Year 1930
Operating Revenues:											
Coke sales	$ 573,391	541,804	612,654	909,657	880,253	637,880	587,670	635,264	414,886	381,241	543,119
Gas sales	549,761	546,131	595,024	577,956	465,513	493,238	543,499	485,133	477,291	384,595	593,507
	$ 1,123,152	1,087,936	1,207,679	1,487,613	1,345,766	1,131,118	1,131,170	1,120,397	892,177	765,836	1,136,626
Operating Revenue Deductions:											
Cost of coke and gas sales	$ 728,884	681,488	745,462	826,586	796,604	759,307	691,037	727,679	585,722	395,460	582,761
Selling expense, coke	79,008	70,907	71,806	94,355	92,666	71,184	66,611	60,664	68,305	31,006	40,391
General and administrative expense	40,185	39,673	65,650	60,214	60,367	68,379	53,908	58,540	42,170	46,079	58,232
Taxes, general	37,705	37,042	33,885	27,455	28,167	32,330	25,840	26,890	30,250	25,050	21,935
Taxes, federal income	18,040	18,338	24,798	31,234	35,202	5,281	19,356	-	-	9,797	27,560
	$ 903,822	867,428	941,622	1,039,844	1,015,508	936,484	856,755	873,764	726,446	507,393	730,881
Operating income before provision for depreciation	$ 219,330	220,508	266,057	447,769	330,258	194,693	274,416	246,633	165,731	258,443	405,745
Provision for depreciation	60,000	60,000	60,000	60,000	48,000	48,000	48,000	48,000	48,000	48,000	79,999
Operating income	$ 159,330	160,508	206,057	387,769	282,258	146,693	226,416	198,633	117,731	210,443	325,745
Non-operating Income:											
Interest on advances to subsidiaries	$ 19,372	18,259	9,772	3,925	698	698	749				
Interest on advances to parent company					(11)	2,136	5,566	1,745			
Interest on joint first mortgage bonds	880	880	880	895							
Other income	6,648	6,110	9,131	14,514	12,501	12,626	12,400	13,888	16,320	12,727	17,944
	$ 26,900	25,249	19,784	19,339	15,188	15,460	18,715	15,633	16,320	12,727	17,944
Gross Income	$ 186,230	185,757	225,841	407,108	297,446	162,153	245,131	214,266	134,051	223,171	343,689
Deductions from Gross Income:											
Interest on funded debt	$ 65,525	65,786	66,794	70,746	88,813	94,896	99,821	104,663	110,517	113,871	118,910
Amortization of bond discount and expense	39,350	39,507	42,054	43,142	7,706	8,147	8,557	8,946	9,291	14,793	11,411
Other interest deductions	3,290	3,804	4,927	6,840		660	540		1,832	1,143	739
Taxes paid for bondholders			257	1,208	2,033	1,596	2,089	2,170	2,527	2,496	1,263
Provision for losses of subsidiaries	(6,694)	(9,949)	564	3,876	(2,145)	12,077					
Other deductions			335		1,700						
	$ 101,471	99,147	114,925	125,813	98,107	117,377	111,007	115,780	124,168	132,304	132,325
Net Income	$ 84,759	86,610	110,917	281,295	199,339	44,776	134,123	98,485	9,883	90,866	211,363
Less dividends:											
On 7% preferred stock	$ 75,000	75,000	75,000	341,250	131,250	105,000	26,250	-	26,250	105,000	105,000
On common stock											20,000
Balance after dividends	$ 9,759	11,610	35,917	(59,955)	68,089	(60,224)	107,873	98,485	(16,367)	(14,134)	86,363

NORTH SHORE GAS COMPANY
and
NORTH SHORE COKE & CHEMICAL COMPANY
Combined Income Account
(after eliminating transactions between the companies)
For the 12 months ended March 31, 1940 and for the calendar years 1939 to 1930, inclusive

	12 months ended 3/31/40	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930
Operating revenues:											
Gas sales	$ 1,477,282	1,437,892	1,405,579	1,369,891	1,353,429	1,319,411	1,322,170	1,405,012	1,570,812	1,678,456	1,761,123
Other gas revenues	25,299	22,126	24,755	18,562	18,594	19,860	19,862	21,519	22,266	21,462	23,067
Coke sales	552,515	603,046	596,979	903,416	835,773	612,196	564,221	616,913	401,273	312,762	543,119
	$ 2,055,[illegible]	1,963,[illegible]	2,027,313	2,291,869	2,207,796	1,951,466	1,906,073	2,043,444	1,994,351	2,012,780	2,327,299
Operating revenue deductions:											
Water gas production - North plant	$ 111,245	85,408	52,226	68,441	127,554	115,912	85,086	70,306	112,449	238,192	188,11[illegible]
" " " - South plant	8,345	6,265	9,266	9,789	10,329	7,106	8,645	8,925	11,066	11,467	11,84[illegible]
Coal gas and coke production	727,651	682,816	747,989	835,129	795,172	747,110	681,636	726,867	588,172	341,095	607,447
Deerfield holder operations	17,657	17,400	18,108	17,376	15,867	15,065	15,343	18,646	19,433	22,991	25,08[illegible]
Transmission expense	80,061	46,847	43,962								
Distribution expense	97,678	92,034	84,536	118,609	105,163	90,811	107,269	119,393	106,596	116,995	130,472
Customers accounting and collecting	66,212	66,341	65,659	62,068	57,725	58,940	63,667	63,492	61,256	68,014	71,58[illegible]
Sales promotion expense	66,775	68,460	66,834	55,301	9,845	23,079	49,980	46,511	38,999	38,170	24,667
Coke sales expense	79,007	70,907	71,606	94,336	92,667	71,125	66,612	80,654	68,304	31,007	40,392
General and administrative expense	137,716	136,264	165,769	164,098	146,978	161,237	170,918	161,299	194,908	193,492	176,827
Taxes - other than federal income	138,476	137,917	128,174	127,512	129,555	114,027	86,163	84,475	85,750	76,050	70,936
Taxes - federal income	30,225	30,217	26,627	31,256	44,151	12,184	19,356	12,947	33,080	44,922	62,086
	$ 1,531,[illegible]	1,454,926	1,461,096	1,603,927	1,534,806	1,416,605	1,354,005	1,390,534	1,319,972	1,182,393	1,389,569
Operating income before provision for depreciation	$ 522,010	526,546	546,217	687,942	672,990	534,861	552,068	652,910	674,379	830,327	937,710
Provision for depreciation	172,681	172,287	171,017	169,909	156,663	156,159	156,818	155,632	155,834	154,435	182,543
Operating income	$ 349,329	354,259	375,200	518,033	516,327	378,702	396,250	497,278	518,545	675,892	755,167
Other income:											
Interest on advances to subsidiaries	$ 19,373	18,265	9,772	3,926	699	699	750	-	-	-	-
Miscellaneous	5,088	5,005	7,491	8,785	34,274	36,939	43,257	47,291	52,192	37,242	26,750
	$ 24,461	23,270	17,263	12,711	34,973	37,638	44,007	47,291	52,192	37,242	26,750
Gross income	$ 373,790	377,529	392,463	530,744	551,300	416,340	440,257	544,569	570,737	713,134	781,917
Deductions from gross income:											
Interest on funded debt	$ 191,292	192,042	198,407	209,600	283,389	293,596	298,963	304,664	310,518	308,805	288,910
Amortization of debt discount & expense	65,830	66,448	72,372	74,230	32,249	30,544	30,964	31,344	31,686	36,469	25,043
Other interest deductions	5,467	5,962	6,604	8,969	1,851	3,218	3,096	2,680	4,624	4,220	4,010
Interest on construction (credit)	-	-	(108)	(248)	(633)	(110)	(40)	(200)	(142)	(1,854)	(3,138
Taxes paid for bondholders	-	-	257	2,032	4,054	3,673	4,063	4,232	4,637	5,872	2,190
Provision for losses of subsidiaries	(6,694)	(9,950)	554	3,876	(2,146)	12,077	-	-	-	-	-
Other deductions	-	-	336	-	4,700	3,177	-	688	1,375	-	-
	$ 255,865	254,542	278,711	298,479	325,464	346,169	337,036	345,346	352,900	353,502	297,015
Net income	$ 117,905	122,987	113,752	232,265	227,836	70,171	103,221	201,221	217,837	359,632	484,902
Less dividends:											
7% preferred stock	$ 75,000	75,000	75,000	341,250	131,250	105,000	54,206	160,720	221,509	308,040	309,746
Common stock									210,000	210,000	20,000
	$ 75,000	75,000	75,000	341,250	131,250	105,000	54,206	160,720	431,509	518,040	329,746
Balance after dividends	$ 42,905	47,987	38,752	(108,985)	96,586	(34,829)	49,015	40,501	(213,672)	(158,408)	155,156

to note that average use after a relatively large drop between 1930 and 1934 resumed an upward trend. The average annual bill, however, did not reverse its downward trend until 1938, and even then it remained practically stationary during the past two years after a relatively small increase. While the company made rate reductions on several occasions during the period under review, a considerable portion of the decline in average price is due to changes in the character of the load rather than to rate reductions. The company lost a considerable volume of water heating business which yielded a relatively high average price, whereas it has taken on a large volume of house-heating business at a much lower average price as will be discussed in more detail later on in this report.

Operating expenses of the Gas Company have been affected to a marked degree by changes which were made in the gas purchase contract with the Coke Company, whereby the average price paid for gas was reduced substantially, particularly since 1935, as will be noted in a subsequent section of this report. In addition, there were downward changes in the price of coke which the Gas Company purchased for water gas generator fuel from the Coke Company, and this, in turn, affected the production cost of water gas to some extent.

Another item of expense which showed substantial reduction for both companies was the fees paid to the Baehr Organization as will be shown later. These fees are included under Administration and General Expenses in the accompanying tables and account to a considerable extent for the variations shown in that item during the period under review.

The variation in the other items of operating expense, particularly the increase shown during recent years, is principally due to payroll increases in order to conform to the N. R. A. and other Federal legislation affecting wages and hours of work, and this is in line with the general trend experienced by most utility companies. The payroll of the Gas Company increased from about $217,500 for 1933 to $317,800 for 1939, an increase of 46½%. The corresponding increase in the case of the Coke Company was from about $136,000 in 1933 to $191,000 in 1939, an increase of 40½%.

It is of interest to note the large increase in sales promotion expense, particularly subsequent to 1936. This reflects the more aggressive load-building activities which the company has been carrying on during recent years.

In line with the general experience of the utility industry, the taxes of the Gas Company increased sharply as the increase in general taxes alone amounted to 87½% between 1933 and 1939. The corresponding increase in the case of the Coke Company amounted to 38%.

In the case of North Shore Coke & Chemical Company, the substantial increase which occurred in the revenues derived from the sale of coke was sufficient to offset the reduction in income as a result of the change in the price of gas to North Shore Gas Company in 1935, and the gross revenues of the Coke Company in 1935 were substantially the same as those derived under the higher gas prices in effect in 1934. The higher coke revenues received in 1935 were primarily due to better average coke prices rather than to a substantial increase in volume. The average price of coke continued upward through 1938, and this, together with a very good volume of coke sales enjoyed in 1936 and 1937, accounts for the substantial increase in gross revenues shown for those years in the accompanying table. The volumeof coke sales showed a drop of about 33% between 1937 and 1939, and this, together with a 12% decline in the average price per ton, accounts for the decline in revenues experienced during that period. As previously mentioned, the over-all earnings of the Coke Company are influenced to a marked degree by the conditions of the coke market, and this factor is bound to result in relatively wide fluctuations in the company's earnings similar to a concern of industrial nature.

With respect to the Coke Company's operating expenses, the two most important factors are, of course, the cost of coal and the conversion labor, in the order named. The increase in payroll has already been mentioned above. The average cost per ton of coal, including a small handling charge, declined 13½% between 1930 and 1932, but experienced a subsequent increase of about 20% between 1932 and 1939. This average cost, however, remained practically stationary during the past three years, and the 1939 average cost per ton was only about 9% higher than the corresponding 1930 figure.

The following table gives a clear picture of the trend of net operating income for the period under review. In order to eliminate the influence of varying depreciation charges, the figures used for this purpose are the net operating income before depreciation. These figures have also been translated to index numbers using 1930 as a base (i.e., 1930 net operating income = 100%). The results are as follows:

	Gas Company		Coke Company		Combined Basis	
Year	$	Index - %	$	Index - %	$	Index - %
1930	521,527	100.0	405,745	100.0	937,710	100.0
1931	577,861	110.8	258,444	63.6	830,327	88.8
1932	493,046	94.5	165,731	40.8	674,379	71.8
1933	393,739	75.5	246,633	60.9	652,910	69.5
1934	269,345	51.6	274,416	67.5	552,068	58.8
1935	327,926	62.9	194,693	48.0	534,861	57.0
1936	332,049	63.6	332,258	81.8	672,990	71.8
1937	231,010	44.2	447,769	110.0	687,942	73.4
1938	275,203	52.6	226,057	65.6	546,217	58.2
1939	304,040	59.3	220,502	54.5	526,546	56.1
12 mos. ended 3/31/40	300,545	57.5	219,330	54.0	522,010	55.6

In view of the changes which have taken place in the gas purchase contract, the combined figures for both companies given above afford the best basis for judging the trend. It will be noted that the net operating income of the two properties combined showed a sharp downward trend reaching their first minimum point in 1935, and the net operating income in that year was equivalent to 57% of the 1930 figure. In 1936 the figure increased to 71.8% and in 1937 to 73.4%. These increases, however, were primarily due to a relatively good coke market and not to any substantial improvement in gas operations. The downward trend was again resumed in 1938, and for the twelve months ended March 31, 1940, net operating income, before depreciation, reached a new low point which was equivalent to only 55.6% of the 1930 results.

While the above figures indicate a decidedly unfavorable trend in net operating income, it should be noted that the experience of the properties under investigation is in line with the experience of the manufactured gas industry as a whole, and likewise follows closely the experience of a number of individual companies distributing manufactured gas which we have analyzed, although a number of such companies have experienced some recovery in net operating income during the past two years in relationship to their previous low point. Comparatively speaking, it appears that the combined North Shore system is somewhat more dependent on coke sales than some of the other systems, and during periods of good coke market conditions, its net earnings would show a substantial increase such as that experienced during 1936 and 1937, for example.

Analysis of <u>Gas Revenues</u>. We are giving below a breakdown of the gas operating revenues for the year 1939 by customer classes, together with the corresponding M.c.f sales and average realization per M.c.f. sold to each class.

	Gas Revenue		Gas Sold		Avg. Rev. ¢
	Amount	% of Total	M.c.f.	% of Total	per M.c.f.Sold
Residential	$1,275,492	88.7	1,337,471	86.7	95.2
Commercial	100,260	7.0	104,242	6.8	96.2
Industrial	59,271	4.1	97,384	6.3	61.0
Municipal Ltg.	2,268	.2	2,370	0.2	95.6
Total	$1,437,291	100.0	1,541,647	100.0	93.2

It should be noted that the totals shown in the above table do not check with the corresponding figures shown on Page 7 of the report. The reason for this is that the latter figures include forfeited discounts and interdepartmental sales, whereas the figures in the above table represent only the net billings to the consumers. The above tabulation shows an excellent diversification of gas revenue, as industrial sales accounted for only 4.1% of the total gas operating revenue in 1939, with the balance being accounted for by the stable classes of service. It will be noted particularly that the residential class of service accounted for 88.7% of the total gas revenue and for 86.7% of the M.c.f. sold. As will be shown in a subsequent paragraph, however, about 20% of the residential revenue comes from house-heating service and this, of course, is influenced to some extent by the weather conditions prevailing during the heating season.

The company has 7 different rate schedules in effect. These rate schedules are on a cu. ft. basis and apply uniformly throughout the entire territory served. In view of the fact, however, that the heat content of the gas is 565 B.t.u. per cu. ft. for the low pressure system serving the City of Waukegan as compared with a 540 B.t.u. standard maintained in the high-pressure area, the rates applicable outside of Waukegan, in effect, are about 5% higher on a therm basis. This differential is not subject to serious criticism, in our opinion, as the cost of rendering the service in the high-pressure area is considerably higher than that for Waukegan owing to greater transmission and other costs.

From the standpoint of the relative volume of sales, the three most important rate schedules are the so-called "General Rate" the "Optional Automatic Water Heating Rate" and the "Optional Combination Space Heating and/or Air Conditioning Rate." Each one of these rates is available to customers in any class of service that qualifies under the provisions specified in the rate schedule, particularly as to the minimum charge. For example, commercial or industrial customers using gas for space-heating in addition to other purposes, and who can obtain service at a lower cost under the space-heating rate are billed under that rate for their entire consumption rather than under the general rate. The three principal rate schedules referred to above are as follows:

General Rate

First	400	cu. ft. per month	-	$ .60
Next	5,000	" " " "		1.27 per M.c.f.
"	10,000	" " " "		1.15 " "
"	15,000	" " " "		1.05 " "
"	20,000	" " " "		.95 " "
"	50,000	" " " "		.85 " "
Over	100,400	" " " "		.75 " "
Minimum Charge				.60 per month

Optional Automatic Water-Heating Rate

First	400	cu. ft. per month	$1.00
Next	2,000	" " " "	1.27 per M.c.f.
"	3,000	" " " "	1.00 " "
Over	5,400	" " " "	.70 " "
Minimum charge			1.00 per month

Optional Combination Space Heating and/or Air Conditioning Rate

First	400 cu. ft. per month	-	$1.00	
Next	2,000 " " " "		1.27	per M.c.f.
"	3,000 " " " "		1.00	" "
"	15,000 " " " "		.50	" "
Over	20,400 " " " "		.45	" "
Minimum charge	- $100	-	per meter per year	

In 1939, the billings to the various classes of customers under the above three rate schedules accounted for 90.4% of the company's total gas revenues and for 89.5% of the total M.c.f. volume of sales, as will be noted from the following tabulation:

	Residential	Commer-cial	Indus-trial	Total	% of Co. Total
Revenue					
General Rate	$ 703,847	$ 62,268	$ 9,494	$ 775,609	54
Optional Automatic Water Heatg. Rate	218,215	31,055	5,276	254,546	17.7
Optional Combination Space Heating Rate	265,432	4,007	-	269,439	18.7
Total	$1,187,494	$ 97,330	$14,770	$1,299,594	90.4
M.c.f. Sales					
General Rate	538,142	62,770	9,040	609,952	39.5
Optional Automatic Water Heatg. Rate	220,487	40,974	7,253	268,714	17.4
Optional Combination Space Heating Rate	495,772	6,943	-	502,715	32.6
Total	$1,254,401	$110,687	$16,293	$1,381,381	89.5
Average Price per M.c.f. Sold					
General Rate	$1.31	$0.99	$1.05	$1.27	
Optional Automatic Water Heating Rate	0.99	0.76	0.73	0.95	
Optional Combination Space Heating Rate	0.54	0.58	-	0.54	
Composite Average	$0.95	$0.88	$0.91	$0.94	

The above table also shows the average realization per M.c.f. sold under each of the rates, and it will be noted in that connection that the general rate resulted in a relatively high price of $1.27 per M.c.f. while the average prices obtained under the other two rates were considerably lower, as would be expected.

A further analysis of the residential revenues for 1939 shows that over 55% of such revenues were billed under the general rate, 17% under the optional water-heating rate, and 21% under the optional combination space-heating rate. The balance was accounted for by billings under another water-heating rate and under two other space-heating rates which, however, are higher for large users than the rates shown above.

It should be noted that all residential customers not having an automatic water heater, or not using gas for space-heating, are billed under the general rate, while the entire consumption of a customer using service for cooking and automatic water-heating is billed under the water-heating rate and, similarly, the entire consumption of a customer using service for cooking, space-heating and water-heating is billed under the space-heating rates.

In order to show the position of the company's principal rates with respect to relative rate level and promotional attractiveness, we are giving below a tabulation of computed monthly bills at various consumptions obtained under the rates charged by the company, and under the rates charged by the three other gas companies serving the greater Chicago area. In view of the fact that the other companies serve 800 B.t.u. mixed gas, we have converted the consumption blocks to therms in these computations in order to place them on a comparable basis. By way of further explanation, it may be stated that a monthly consumption of 10 therms represents the average usage for cooking purposes, while the 20 therm block may be taken to represent cooking and refrigeration. The 30 therm block may be taken as the consumption for cooking and automatic water-heating, and the 40 therm block is representative of the monthly consumption for cooking, automatic water-heating and refrigeration. The 100 - 300 therm blocks include gas used for house-heating purposes, in addition to the other uses mentioned above. The comparison is as follows:

	10 Therms	20 Therms	30 Therms	40 Therms	100 Therms	200 Therms	300 Therms
North Shore Gas Co.							
Waukegan	$2.34	$4.59	$6.41	$7.68	$12.65	$20.75	$28.72
All Other Towns	2.44	4.79	6.69	7.95	13.11	21.52	29.85
P. S. Co. of Northern Illinois	2.15	4.20	5.45	6.65	10.75	17.75	24.75
Western United Gas & Electric Co.	2.33	4.60	4.84	6.24	9.90	17.40	24.90
Peoples Gas Light & Coke Co.	1.84	3.39	4.65	5.35	9.55	16.55	23.55

It will be noted from the above comparison that the residential rates of North Shore Gas Company are generally higher than those charged by the other nearby companies. It is true, of course, that because of mixed natural and manufactured gas operations, the other companies have lower gas costs, and the rate differential may, therefore, be justified on account of that factor. It should be noted, however, that many of the customers of the companies using the above comparison are employed in Chicago or have occasion to move from the territory of one company to that of the other, from time to time. This places them in a position to make a comparison of their gas bills, and consequently the existing rate differentials can conceivably have a detrimental effect on public relations. It will be noted that for small consumptions such as 10 therms per month, the differential is not very great, particularly as compared to the rates charged by the other suburban companies, although in terms of the rate charged by Peoples Gas Light and Coke Company for service within the city limits of Chicago the North Shore Gas Company's rate works out to a 33% higher cost for a 10 therm monthly consumption. The above comparison also shows that the rates of North Shore Gas Company are considerably higher at the higher average monthly consumptions than those charged by the other companies, and likewise the company's rates are not as promotional as those of the other companies. The rate structure of North Shore Gas Company with respect to its competitive position with other fuel substitutes will be treated in detail under a subsequent heading.

Before leaving the question of rates, it may be of interest to observe that although a part of the industrial consumption is billed at the general or water-heating rates, about 74-1/2% of the industrial revenue and 83½% of the M.c.f. volume in 1939 was billed under a regular industrial service rate which is as follows:

<u>Readiness to Serve Charge</u>

Per Customer per Month	$50.00
Plus	

<u>Commodity Charge</u>

First	2,000 M.c.f. per month	0.55 per M.c.f.
Next	2,000 " " "	.50 " "
Over	4,000 " " "	.45 " "

Minimum Bill per Customer per Month - $50.00

The industrial rate has a fuel clause which protects the company against a rise in generator fuel costs and, conversely, benefits the consumer when such costs go down. Incidentally, there are only nine industrial users served under the above rate among those listed on Page 8 of this report, although the others are also gas consumers but are served under the General Rate. The largest industrial user accounted for about 20½% of the total industrial revenue in 1939, while the second largest accounted for about 17% of such revenue. As previously mentioned, however, the industrial revenues as a whole constitute only a very minor part of the total gas revenue of the company, and the fact that the two largest industrial users account for 37½% of the industrial revenue does not seem to detract from the excellent over-all revenue diversification which the company enjoys. Incidentally, the average realization under the above industrial rate in 1939 amounted to 54.2¢ per M.c.f. as compared with an average of 61¢ for all industrial sales.

In view of the great importance of the residential class of business in the total picture, a detailed analysis of its consumption characteristics is of interest at this juncture. The average monthly consumption per domestic customer served under the general rate was about 2,300 cu. ft. in 1939. This average consumption, however, varied widely among the various operating districts as follows:

Waukegan District	1840 cu. ft.
Lake Forest District	3240 cu. ft.
Highland Park District	2500 cu. ft.
Winnetka District	2880 cu. ft.
Libertyville District	1970 cu. ft.

For the general rate as a whole, irrespective of class of service, the M.c.f. sales in 1939 were distributed among the various rate blocks as follows:

	Rate	M.c.f.
Minimum bill		5,356
First 400 cu. ft.	$ .60	93,372
Next 5,000 " "	1.27	414,469
" 10,000 " "	1.15	42,169
" 15,000 " "	1.05	14,494
" 20.000 " "	.95	8,694
" 50,000 " "	.85	9,787
Over 104,400 " "	.75	21,663
Total		610,004

The significant thing to observe in the above breakdown is that 513,197 M.c.f. were billed at $1.27 or more per M.c.f. and this was equivalent to 33-1/3% of the company's total M.c.f. sales and to about 37½% of the company's total gas revenues in 1939. It should be noted further that the volume of gas sold at less than $1.27 per M.c.f. under the above rate is relatively small in comparison to the total. Obviously, this rate is designed for the higher price business.

A similar analysis of the 1939 sales billed under the optional combination water-heating rate (which, incidentally, was placed in effect on April 1, 1937) shows that for the residential class alone the average monthly consumption for the entire territory was 9,150 cu. ft. This consumption, however, was much higher for the Lake Forest district, as will be seen from the following breakdown.

Waukegan District	8,650 cu. ft.
Lake Forest District	11,350 " "
Highland Park District	9,000 " "
Winnetka District	9,000 " "
Libertyville District	8,000 " "

The distribution of 1939 sales to all consumers served under this rate was divided between the various rate steps as follows:

	Rate	M.c.f.
Minimum Bill		None
First 400 cu. ft.	$1.00	9,637
Next 2,000 " "	1.27	48,188
" 3,000 " "	1.00	72,103
Over 5,400 " "	.70	138,785
Total		268,713

It is interesting to observe that 51½% of the above volume fell into the 70¢ step, about 27% was billed at the $1.00 step, and about 18% was billed at the $1.27 step, while the balance was billed at the initial step of the rate which is equivalent to $2.50 per M.c.f. Another interesting observation is that the sales billed at the $1.00 and 70¢ steps of the above rate represented about 13.7% of the company's total M.c.f. sales and 11.8% of the 1939 total gas revenue.

The optional combination space-heating rate as originally placed in effect on May 1, 1935, had a bottom step of 55¢ per M.c.f for all monthly consumptions in excess of 5,400 cu. ft. On April 1, 1937 this step was shortened to 15,000 cu. ft. per month, and the price was reduced to 50¢. In addition there was a 45¢ step inserted for all consumptions in excess of 20,400 cu. ft. per month. Apparently this change was made in order to stimulate a larger volume of house-heating business. It is of interest to note that the average monthly consumption under this rate in 1939 amounted to approximately 31,900 cu. ft. and the variation between the different districts was as follows:

Waukegan District	22,400 cu. ft.
Lake Forest District	35,200 " "
Highland Park District	34,500 " "
Winnetka District	32,800 " "
Libertyville District	25,800 " "

Of more particular significance is the following distribution of the billings under this rate among the various steps of the price schedule:

	Rate	M.c.f.
Minimum Bill		1
First 400 cu. ft.	$1.00	3,661
Next 2,000 " "	1.20	18,288
" 3,000 " "	1.00	27,354
" 15,000 " "	.50	112,984
Over 20,400 " "	.45	340,565
Total		502,853

The significant point disclosed by the above figures is that 64% of the total volume was billed at the 45¢ step of the rate which does not, in our opinion, yield a satisfactory margin of profit, even on an increment cost basis under existing conditions, and furthermore, 22½% of the above volume was billed at the 50¢ step. The volume of gas sold for house-heating purposes at the 50¢ and 45¢ steps represented 29.4% of the company's total M.c.f. sales to all classes of service in 1939, whereas the corresponding revenue received from this part of the house-heating load was equivalent to only 14½% of the total gas revenue. As previously mentioned, the development of any substantial house-heating business from here on would be relatively unprofitable under existing conditions, particularly when the point is reached where additional production facilities would have to be provided in order to take care of the sharp peaks occurring during extremely cold weather.

As previously noted, the character of the company's gas load has undergone considerable change during recent years due to the shifting of load from the higher to the lower rate schedules, and likewise due to the development of low-priced house-heating business. This will be evident from an analysis of the residential load summarized under the following tabulation:

	1939	1938	1937	1936	1935	1934
Domestic Revenues (In. Thous.)						
General & Water Heating Rates	$962	$986	$986	$1,010	$1,016	$1,057
% of Total Co. Revenues	67	70.2	71.7	73.5	75.7	78.8
House Heating Rates	$278	$242	$196	$165	$145	$124
% of Total Co. Revenues	19.3	17.2	14.3	12	10.8	9.2
Total	$1,240	$1,228	$1,182	$1,175	$1,161	$1,181
% of Total Co. Revenues	86.3	87.4	86	85.5	86.5	88.0
Domestic Sales (1,000 M.c.f.)						
General & Water Htg. Rates	796	816	809	812	819	834
% of Total Co. Sales	51.7	56	59	63.5	67.1	71.8
House Heating Rates	513	444	347	269	230	187
% of Total Company Sales	33.3	30.5	25.3	21	18.9	16.1
Total	1,309	1,260	1,156	1,081	1,049	1,021
% of Total Company Sales	85.0	86.5	84.3	84.5	86.0	87.9
Average Domestic Revenue (Dollars per M.c.f. Sold)						
General & Water Htg. Rates	$1.26	$1.22	$1.22	$1.25	$1.24	$1.27
House Heating Rates	0.54	0.55	0.57	0.61	0.63	0.66
Total	0.95	0.98	1.02	1.09	1.11	1.16

Before explaining the above table, it is well to note that the figures shown under the "General & Water Heating Rates" classification exclude minimum bills, prepaid meter and employee service accounts, and the "House Heating Rate" figures include all space-heating sales, a small portion of which is to commercial and industrial customers in addition to domestic house-heating sales, but these figures exclude minimum bills. This accounts for the discrepancies between the above figures and other figures previously presented. At any rate, the above figures are comparable throughout the period covered, and this gives a proper basis for analyzing the trend experienced in the character of the residential load.

The above table shows that the domestic revenues collected under the general and water-heating rates declined about 9% between 1934 and 1939, whereas the house-heating revenues showed an increase of 124%. As a result, the general and water-heating classification in 1939 accounted for only 67% of the total gas revenues of the company, whereas in 1934 it accounted for 78.8%. Similarly, the low-priced house-heating business in 1939 accounted for 19.3% of the company's gross gas revenue, whereas the corresponding 1934 figure was only 9.2%. From the standpoint of M.c.f. volume, the sales under the general and water-heating classification accounted for 71.8% of the company's total M.c.f. sales in 1934, whereas by 1939 this figure dropped to 51.7%. On the other hand, the corresponding figures for the house-heating classification showed a sharp rise from 16.1% in 1934 to 33-1/3% in 1939.

We made a further breakdown of the general and water-heating rate classification, but the figures available for this purpose cover only the past three years and are on a somewhat different basis in that they include all domestic sales under the general rate and the water-heating sales under only the two principal automatic water-heating rate schedules. The pertinent data are tabulated below, and in this connection we are also showing the domestic house-heating sales billed under the two principal space-heating rates:

	General Rate	Automatic Water Heating Rates	House Heating Rates	Total
Revenue				
1939	$703,847	$272,176	$265,415	$1,241,438
1938	737,700	261,050	227,443	1,226,193
1937	749,860	248,409	188,242	1,186,511
M.c.f. Sales				
1939	538,142	263,513	495,792	1,297,447
1938	566,338	254,411	426,484	1,247,233
1937	576,520	237,258	335,995	1,149,773
Average No. of Customers				
1939	20,300	2,970	1,259	24,529
1938	20,250	2,810	1,135	24,195
1937	20,400	2,590	960	23,950
Average Monthly Consumption Per Customer - M.c.f.				
1939	2.3	7.4	32.9	4.4
1938	2.3	7.5	31.3	4.3
1937	2.4	7.6	29.2	4.0
Average Price Per M.c.f. Sold				
1939	$1.25	$1.03	53.5¢	95.9¢
1938	1.32	1.03	53.1¢	98.4¢
1937	1.29	1.05	55.2¢	$1.03

It will be noted that the sales under the general rate showed a continual decline during the above period, whereas the sales under the automatic water-heating rates showed some increase. It is significant to note, however, that the combined revenues for these two classifications showed a drop of about $22,000 between 1937 and 1939 and while this decline was more than offset by increases in the house-heating business it will be remembered that this class of service yields a relatively small profit margin even on an increment cost basis. The above table also gives the average monthly consumptions per customer, and the corresponding average price per M.c.f. sold. The figures show that while the decline in the average price per M.c.f between 1937 and 1939 amounted only to 3% for the general classification, only to 2% for the automatic water-heating classification, and only to 3% for the house-heating classification, the corresponding decline in the combined average price to all classes was 6%, and this greater dilution in the over-all average price was due to the increase in the volume of house-heating sales at a much lower price than that obtained for the other classes of usage.

The operating results during the 1934 - 1939 period under review were also influenced by rate reductions in addition to the shifting of load discussed above. One of these reductions was placed in effect in April, 1934, and affected the general rate to the extent of $25,000 per year on the basis of the then volume of business served under that rate. A similar rate reduction of about $35,000 per year was placed in effect in December, 1934 and affected the water-heating rate, and that rate was further reduced to the extent of about $27,000 per year in April, 1937, making a total annual rate reduction of $62,000 for the water-heating rate during that period. The house-heating rate reduction placed in effect in May, 1935, amounted to only $7,000 per year, and the further adjustment made in April, 1937, was calculated to yield an annual reduction of $20,000 on the basis of the volume of house-heating business served at that time. While the aforementioned rate reductions had an influence on the average realization per M.c.f. sold, the foregoing analysis points to the conclusion that the shifting of load among the various price levels of the rate schedules exerted a much greater influence on the average price, and the development of a large volume of low-priced house-heating business was a very important factor in that connection. Another factor that influenced the operating results was a relatively substantial loss of water-heating load to competition, and this factor will be discussed in more detail under a subsequent heading.

It is interesting to observe that the company enjoys a much higher average gas consumption per residential customer in comparison with that found for other companies distributing manufactured gas, and this is characteristic of the high income level per family prevailing in the company's territory as a whole. An analysis of the 1939 billings to residential consumers shows that only 6½% of such billings represented minimum bills. This is a relatively excellent record, as a number of other companies which we have analyzed showed a much greater percentage of minimum bill users.

Analysis of Coke Business The importance of the coke business to the North Shore System will be obvious from the fact that coke revenues in 1939 were equivalent to 133½% of the combined gross income available for fixed charges of the two companies, and this ratio was even higher at 174½% in a good coke year such as 1937. It is evident that the net earnings of this system are dependent to a large extent upon the coke market, and an analysis of the coke business is therefore of great importance in the present study.

The following table presents the pertinent coke production and sales statistics of North Shore Coke & Chemical Company for the past 10-year period.

	Coke		Coke Sales - Tons			
			To Gas Company		To	
Year	Tons on Hand First of Year	Tons Produced	Tons	% of Total	Others	Total
1940	29,868					
1939	22,259	99,506	5,040	6.1	77,677	82,717
1938	4,622	113,851	4,186	4.8	83,139	87,325
1937	9,357	119,894	1,387	1.1	122,229	123,616
1936	21,246	111,807	3,216	2.5	123,555	126,771
1935	28,310	102,405	6,590	6.2	98,994	105,584
1934	22,646	104,632	3,534	3.6	95,946	99,480
1933	64,608	88,865	3,058	2.3	127,769	130,827
1932	77,521	71,742	2,195	2.6	82,460	84,655
1931	66,441	74,004	10,129	16.1	52,794	62,923
1930	35,166	114,972	12,559	15.2	70,063	82,622

It will be noted that a small portion of the total tonnage produced was sold to the Gas Company for use as water gas generator fuel. In addition, since 1937 there were 17,649 tons of coke used by the producer gas plant of the Coke Company, and 2,807 tons by the yard locomotive, and this accounts for the discrepancy found by comparing the tons on hand and produced with the coke sales figures tabulated above.

Before drawing conclusions from the above figures, it is essential also to note the corresponding price variations tabulated below:

Year	Average Price per Ton of Coke Sold: On Total Sales	On Sales to Gas Company	On Sales to Others	Coal: Average Cost per Ton Delivered to Coke Plant
1939	$6.35	$3.72	$6.48	$4.43
1938	7.16	3.74	7.18	4.48
1937	7.36	4.50	7.39	4.43
1936	6.71	4.50	6.76	4.28
1935	6.04	4.50	6.18	4.40
1934	5.91	6.49	5.88	4.16
1933	4.86	5.71	4.83	3.48
1932	4.90	6.07	4.87	3.47
1931	6.06	6.76	5.92	3.77
1930	6.57	6.75	7.75	4.05

The sales to the Gas Company are relatively unimportant, and, in fact, in the combined income account table previously presented, such sales were eliminated from coke revenues and the coke used at the water gas plants was treated as an operating expense. An interesting observation disclosed by the above tables, however, is that the average price charged for coke to the Gas Company during the period 1931 - 1934 inclusive, was higher than the average price realized on coke sales to others in the open market. Since 1935, however, this situation was reversed and it seems that the average price charged to the Gas Company during recent years has been considerably below what this company would have to pay for coke in the open market.

The important point to observe from the above tables is the wide variation in the average price of coke sold to others than the Gas Company. The sales price per ton of coke and its consequent influence on the gross income of the system is, to a large extent beyond the control of the management and is governed by the conditions of supply and demand in any given year. Weather conditions play an important part in this situation as they affect the amount of fuel required for domestic heating purposes on the part of the company's coke consumers.

The above table also shows the corresponding variation in the average cost per ton of coal delivered to the coke oven plant. Inasmuch as coal is by far the most important ~~cost~~ element in the production of gas and coke, the relative fluctuations in coal costs and coke prices is of great importance. An analysis of the above figures shows that while the price of coke and the cost of coal dropped considerably between 1930 and 1933, the decline was sharper in the case of coke. Between 1933 and 1935 coke prices stayed closely in gear with the coal costs, but from that point on the cost of coal remained practically stationary whereas the price of coke showed a sharp increase between 1936 and 1937, and then declined considerably during 1938 and 1939. It appears, however, that, fundamentally, the price of coke does not follow the cost of coal. The coke market, in general, is influenced by industrial conditions and particularly by the degree of production activity in the iron and steel industries. The reason for this is that coke is a basic commodity entering into the production of iron and steel, and consequently when these industries operate at a high rate, the heavy demand for metallurgical coke keeps the coke price structure high and, conversely, when the demand for metallurgical coke is low, this places a considerable volume of distress coke on the market, which, in turn, upsets the general coke market including even the price of coke sold for house-heating purposes. As a matter of fact, our studies indicate that even for a company such as North Shore Coke & Chemical Company which sells the bulk of its coke to domestic consumers, coke has a price variation closely approximating that of its related commodity, scrap iron.

In general, domestic coke prices, of course, are also influenced by the cost of competing fuels, and the latter appear to have gained considerable economic advantage over coke during recent years. For example, the development of domestic coal stokers has resulted in more efficient utilization of low grade coal in the heating of homes, and the efficiency of oil burners has increased, and consequently, some of the high-priced markets formerly enjoyed by coke have diminished. On the other hand, the amount of coke produced by a coal gas manufacturing company is directly proportional to the volume of gas produced, and consequently a large gas output makes the problem of disposing of the coke by-product at a good price, that much more difficult. To mitigate the problem to some extent, some companies, during poor coke years, have attempted to cut down the volume of coal gas and to increase the production of water gas. Water gas production, however, except under special circumstances, is more expensive and cannot be used economically as a base load operation. Furthermore, the carburetted water gas process involves the production of tar as a by-product, but the sales price of tar has also been on a decline, and in fact, during the height of the depression many gas companies could not dispose of the tar at a profit. In order to offset the effect of stokers, some gas companies have undertaken to adapt a part of their coke for use as stoker fuel, and we understand that North Shore Coke & Chemical Company has made some experiments along these lines. Stoker coke, however, does not bring as good a price as regular coke if it is to compete with the cheaper coals used as stoker fuel. It should be noted that up to the present time the company has not been confronted with any severe stoker competition and has been able to dispose of its domestic coke in the existing market at relatively good prices, as compared with the lower prices required in order to compete with stoker coal. It should be further noted that the above discussion is intended to bring out the general difficulties confronting the coke market as a whole, and the above comments are not necessarily a specific treatment of the coke market of this particular company.

During the past 5-year period, the coke produced by the company was equivalent to about 70% of the coal carbonized. In other words, for every ton of coal used in the manufacture of gas, the company, on the average, produces about 0.7 ton of coke. With this ratio in mind and at the 1939 differential between the average cost of coal and the gross selling price of coke, the company, in order to offset a given increase in coal costs, would have to obtain an almost equal percentage increase in the average price of coke. For example, an increase of 25¢, or 5.7% in the 1939 coal cost of $4.43 per ton could be absorbed, provided the 1939 average coke price of $6.48 per ton went up 35.7¢ or 5.5%. It may be of interest to note that the type of coal used in the production of coke and gas usually varies between relatively narrow limits in comparison with the price fluctuations of industrial coal.

The Bituminous Coal Division of the Department of the Interior, which was created to administer the so-called Guffey Coal Act, announced some time ago a schedule of coal prices, which if placed in effect, would increase the Coke Company's coal costs 20¢ per ton for the high volatile coal, and 10¢ per ton for the low volatile quality, at the mine. Incidentally, the increase in prices proposed for other types of coal used for industrial and electric generating purposes are considerably greater in many cases. It is difficult to predict the effect of higher coal prices on the company's operations either through Federal regulation or otherwise, but it would seem to us that in a period of a higher coal price level, the coke prices would also increase sufficiently to absorb at least most of the increase in coal costs, if not offset them entirely. The prices now actually being paid for coal by the company are about the same as those paid in 1939. On the other hand, the boat freight rate was recently reduced to the extent of 5¢ per ton as compared with the rate in effect during the 1939 navigation season. Furthermore, the company recently increased its coke prices 50¢ per ton above the corresponding prices of last year, and we understand that the present demand for coke is good for this time of the year. It appears therefore, that the company should have no difficulty in more than absorbing any reasonable anticipated increase in coal prices and it further appears that in the event of high production activity in the iron and steel industry in connection with the National Defense Program the company's coke business may conceivably result in a substantial increase in net earnings such as those experienced in 1937 or even higher, barring, of course, any unusual increases in the cost of coal or in the other costs of doing business.

The general aspects of the company's coke market have already been discussed in considerable detail on Pages 16 and 17 of this report, and it was pointed out in that connection that the company enjoys a relatively good coke market with favorable freight differentials for most of the territory in comparison with the freight rate which other coke producers have to pay in order to reach this particular market from their respective coke plants. The retail prices at which the company's coke was sold in 1939 gave the coke dealers a higher margin of profit than that obtained in a number of other cities, and it would seem, therefore, that these dealers would find it more profitable to continue to distribute Waukegan coke than to switch over to other types. It should be noted also that the bulk of the company's coke is used for house-heating purposes.

ANALYSIS OF OPERATING EXPENSES. Because of the various changes made in the price of gas under the intercompany contract during the period under review, and owing to our belief that any refunding or recapitalization plans to be undertaken should be based on a merger of the two companies, the logical procedure for analyzing the operating expenses is to consider them on a combined system basis.

Total operating expenses on a combined basis, including maintenance, but excluding taxes and depreciation, amounted to $1,268,792 in 1939, and were equivalent to 64.7% of operating revenues as compared with 65.3% in 1938, 63.2% in 1937, 61.3% in 1936, and 66.3% in 1935. The lower operating ratios experienced in 1936 and 1937 mainly reflect the better coke markets enjoyed by the system in those years. When taking into account the fact that from 25% to almost 40% of the gross operating revenue of the system is dependent upon the selling price of coke which is largely beyond the management's control, the above figures indicate that the management has been able to exercise good control over operating expenses during the past five years. It should be noted, however, that the operating ratio of this system is relatively high, although it is typical of the manufactured gas industry. Consequently, even a 10% variation in operating revenue not accompanied by a proportionate change in operating expenses can change the gross income as much as 50%.

The expenses of the system are shown in considerable detail in the preceding 11-year income account tables which give a general picture as to the trend of the various items of expense. The following comments will supplement this picture.

Production Expenses. The largest single item of expense is that incurred in the production of gas. As previously shown on Page 24 of this report, the water gas plants have been supplying between 9% and 17% of the annual gas requirements of the system during recent years, while the balance was supplied from the coke oven plant. The average production cost of water gas delivered to the holders, including maintenance, but excluding taxes and depreciation and other fixed charges, has varied as follows during the past 5-year period:

Year	Average Production Cost per M.c.f. North Plant	South Plant	Total	Average Cost of Oil Used ¢ per Gallon
1939	26.26¢	$3.10	28.06¢	3.53
1938	31.66¢	1.91	36.21¢	4.11
1937	35.32¢	1.23	38.02¢	4.25
1936	33.06¢	3.47	35.46¢	4.29
1935	34.51¢	8.13	36.46¢	4.16

The very excessive unit costs experienced at the South Plant are due to its very small output as this plant is operated only for standby purposes as previously mentioned. This type of operation results in relatively high steam costs which averaged $1.96 per M.c.f. produced in 1939, and likewise results in high maintenance costs on a M.c.f. basis. This high unit cost, however, applies to only a very small amount of gas, and as a result of the low costs experienced at the North Plant, the unit cost of all water gas produced is not high, particularly in view of the fact that the water gas plants carry the peak loads on the system. Inasmuch as the enricher oil represents close to 40% of the total production cost of water gas, we have also included in the above table the cost per gallon of oil used in order to show the relative variations in oil prices. It will be noted that oil prices have been on a decline in recent years and the cost per gallon delivered to the plant in 1939 was less than the minimum average cost of 3.55¢ per gallon reached in 1932. In 1930, the average cost was 4.87¢ per gallon, whereas prior to the depression the average price was in the neighborhood of 6¢ per gallon.

With reference to the production cost of coal gas, the Coke Company uses the industrial method of accounting, which, while correct under the present method of separate operation of the coke oven plant, does not give a proper basis of comparing the unit production costs with those experienced by other gas utility companies manufacturing coal gas. The gas utility companies, of course, in accounting for the cost of gas, follow the method prescribed by the various regulatory commissions in accordance with the uniform classification of accounts applicable to utility operations. However, for comparative purposes, we have recast the operating figures of the coke oven plant so as to place them on a utility accounting basis, and on such a basis the production costs during the past 5-year period have been substantially as follows:

	1939 $	1938 $	1937 $	1936 $	1935 $
Gross Production Expense	970,248	1,103,001	1,057,331	961,005	942,197
Credits for Residuals					
Coke and Breeze	586,929	805,304	861,431	757,336	586,402
Tar	59,451	70,915	69,793	61,211	51,669
Sulphate	33,228	38,539	38,860	29,211	30,808
Steam	3,347	3,084	3,651	3,268	3,883
Total	682,955	917,842	973,735	851,026	672,762
Net Cost of Coal Gas	287,293	185,159	83,596	109,979	269,435
Coal Gas Produced (1,000 M.c.f.)	1416.9	1447.5	1259.7	1060.2	1029.3
Aver. Cost -¢ per M.c.f.	20.28	12.79	6.64	10.37	26.18

The costs as shown above include all of the operating and maintenance costs of the Coke Company, except taxes and depreciation and other fixed charges on the investment in the plant facilities. It will be noted that the average production cost per M.c.f. of coal gas varied between 6.64¢ and 26.18¢. The lowest cost occurred in 1937 and had the benefit of a good coke market which resulted in a much higher coke credit than that for 1935 which was a relatively poor coke market year and resulted in the highest average net cost of 26.18¢ per M.c.f. of gas delivered to the holders. The composite average cost for the above 5-year period amounted to 15.06¢ per M.c.f. and this may be taken as an average representative figure for the system as the above 5-year period included both relatively good and poor coke years. The above composite average of 15.06¢ per M.c.f. of coal gas compares very favorably with the experience of a number of other companies producing coal gas which we have analyzed.

The combined average production cost of both water gas and coal gas delivered to the holders during the period under review was as follows:

	1939	1938	1937	1936	1935	5-Year Average
¢ per M.c.f.	21.6	15.2	12.0	17.1	28.6	18.9
¢ per Therm	3.90	2.75	2.14	3.04	5.14	3.4

The above unit production cost figures exclude taxes and depreciation, as well as interest on the investment involved. On the whole, the gas production costs of this system compare favorably with the corresponding costs of other companies manufacturing water gas and coal gas in the same proportionate amount as that manufactured by this system.

As a matter of interest, the above 5-year average composite cost of 3.4¢ per therm compares with an average price of about 4.75¢ per therm paid by the nearby Public Service Company of Northern Illinois for firm mixed gas purchased from Peoples Gas Light and Coke Company. The average price paid by Public Service Company of Northern Illinois, however, includes fixed charges on the supplier's investment, and therefore, is not a strictly comparable figure. A comparable situation is the production costs experienced at the coke oven plant of Wisconsin Gas and Electric Company at Racine, Wisconsin. This plant is considered to be among the most efficient plants in the country, and its coal costs are comparable to those of North Shore Coke & Chemical Company. From an analysis of the operating results of the Racine plant, we found that its average production costs during the past 5-year period on the same basis as that used in the above analysis of the gas costs of the North Shore System were equivalent to 3.64¢ per therm as compared with a 5-year composite average figure of 3.4¢ per therm for the North Shore System. As previously stated, the gas production costs of this system also compare very favorably with those of a number of other manufacturing gas companies which we have analyzed.

<u>Gas Purchase Contract</u>. The above discussion treats the gas production costs on a combined basis, that is, assuming that the two companies had been merged and operated as a single system. Actually, however, as previously stated, the gas produced at the coke oven plant is sold to the Gas Company under a contract dated February 17, 1927, and extending to July 1, 1953, with right of extension by either party for ten additional years. The terms of this contract and the price of gas thereunder have been changed from time to time by mutual agreement, and are discussed below, as a matter of historical interest.

The contract originally specified a flat price of 60¢ per M.c.f. of unpurified gas with average heat content of 570 B.t.u. and the daily deliveries were limited to 3,000,000 cubic feet. This price was based on a coal cost of $4.98 per ton delivered to the plant, plus a conversion cost of 85¢ per ton, and the basic price was to be adjusted monthly in direct proportion to any changes in the sum of these two variables. This price schedule remained in effect from June 1, 1928 to December 1, 1930.

It appears that during 1930 the amount of coke in stock continued to grow to alarming proportions amounting, at the end of the year, to 66,441 tons at the Coke Company's yard, in addition to a supply of 8,500 tons purchased by the Gas Company and stored in its yard. Under Article 22 of the contract, which contains a force majeure clause, the Coke Company determined to reduce its operations to avoid the piling up of coke. Operations were reduced and the price of gas was arbitrarily fixed at 50.687¢ per M.c.f. which was substantially equivalent to the average price paid in the previous year. This flat price remained in effect from January 1, 1931 to March 31, 1932, and resulted in some increase in the average price paid by the Gas Company as such price would have been 48.148¢ per M.c.f. had the original terms of the contract been operative. From April 1, 1932, until January 31, 1935, the gas was billed under the provisions of the original contract, but from February 1, 1935 until August 31, 1937, by mutual agreement, a discount of 6¢ per M.c.f. was allowed to the Gas Company as a deduction from the price computed under the terms of the original agreement, and, therefore, the Gas Company received considerable benefit during that period.

In December, 1936, through an amendatory agreement between the two parties, the price of gas was changed as follows: For the first 3,000,000 cu. ft. per day, the cost of gas was to be billed at the price specified in the original contract less a discount of 6¢ per M.c.f., but upon completion of a producer plant to be constructed by the Coke Company, the next 1,500,000 cu. ft. per day, (but not to exceed 300 million cu. ft. per year) was to be charged at 30¢ per M.c.f. so long as the producer gas was in operation. The above price schedule remained in effect until June 1, 1938.

On June 1, 1938, a second amendatory agreement was entered into providing a price schedule as follows:

For the first 60,000,000 cu. ft. per month	- 45¢	per M.c.f.
For the next 30,000,000 cu. ft. per month	- 40¢	" "
For the next 30,000,000 cu. ft. per month	- 30¢	" "
All over 120,000,000 cu. ft. per month	- 20¢	" "

The above prices for unpurified gas are still in effect, and are based on a coal cost of $4.80 per ton in the stock pile, plus a labor conversion cost of 70¢ per ton of coal or a total sum of $5.50. The amendatory agreement provides that the above prices are to remain fixed unless the sum of the two variables should go above $6.00 or fall below $5.00 in which event the price of gas is to increase or decrease in direct proportions as the sum of the two variable bases shall increase or decrease. In addition, the second amendatory agreement eliminated the rental formerly paid by the Gas Company on the space occupied by its purification plant at the Coke Company's plant.

It is impossible to determine precisely the amount of the reductions granted to the Gas Company under the above modifications of the original contract, because the average price paid by the Gas Company was influenced to some extent by the amount of water gas manufactured at its own plants. Assuming, however, that the same amount of gas would have been purchased by the Gas Company during the period under review as that actually purchased, the annual payments calculated under the terms of the original contract would compare with the payments actually made for purchased gas as follows:

Year	Payments Computed on Basis of Original Contract Without Giving Effect to Any of The Amendatory Agreements		Actual Payments made by Gas Company		Difference
		¢ per M.c.f.		¢ per M.c.f.	
1928	$304,011	49.34	$304,011	49.34	-
1929	557,851	50.01	557,851	50.01	-
1930	593,507	50.68	593,507	50.68	-
1931	365,332	48.15	384,597	50.69	$19,265*
1932	465,172	43.72	477,291	44.86	12,119*
1933	485,132	43.07	485,132	43.07	-
1934	543,698	50.50	543,499	50.50	199
1935	549,995	53.43	493,289	47.92	56,706
1936	559,101	52.74	496,513	46.74	62,588
1937	688,668	54.67	577,956	45.88	110,712
1938	791,008	54.65	595,025	45.33	195,983
1939	779,239	54.99	546,132	38.54	233,107
	Net Difference				$627,911

* - Red Figure

As will be noted from the table above, the aforementioned changes in the gas purchase contract resulted in a net benefit of $627,911 to the Gas Company during the period under review as compared with the amounts it would have had to pay for gas had there been no change in the original terms of the contract. While the above discussion and figures are of historical interest, it should be noted that in the event of merger of the two properties, this intercompany contract would be eliminated and the actual gas production costs under such combined operation have already been discussed above, under the heading of "Production Expenses."

The various revisions made in the price schedule of the gas contract point to the conclusion that the contract has not worked out satisfactorily, and it seems fair to assume that under separate operation of the two companies further modifications will probably be required in the future in order to meet changing conditions. Furthermore, an intercompany contract of this kind brings up the question of jurisdiction on the part of the Illinois Commerce Commission over the Coke Company's property and in a rate proceeding considerable controversy could conceivably arise as to whether or not the amount included in operating expenses of the Gas Company for purchased gas is reasonable in relationship to the cost of such gas. A merger of the two properties into a single corporate structure would eliminate questions and controversies of this type, and these are additional reasons which lead us to believe that such merger is a highly desirable step.

Other Operating <u>Expenses.</u> The table on the following page gives a comparison of the other principal items of expense incurred by the North Shore System in its gas utility operations, with similar items of expense incurred by twelve other companies. This comparison relates the various items of expense on a per customer basis, and also as a percentage of gross operating revenue.

Our studies of gas utility operating expenses such as transmission and distribution, customers' accounting and collection, sales promotion, and administrative and general expenses, show that, generally speaking, some of these expenses vary relatively in proportion to the number of customers served, while others are quite independent of that factor. However, the relationship of most of the expense items to the number of customers served is sufficiently close to serve as a fair basis of comparison in the unit cost per customer between companies. For example, the maintenance portion of the transmission and distribution expense is in part dependent upon the number of miles in the system, but normally about 75% of the total maintenance is accounted for by the maintenance of meters and services, and these expenses vary more nearly with the number of customers served than with the mileage of the mains. On the other hand, pumping and regulator expense, which is one of the items included in the transmission and distribution group of accounts, is so dependent upon local conditions that a normal figure can hardly

Unit Operating Expenses

Company	Transmission and Distribution		Customers' Accounts and Collection		Sales Promotion		Administrative and General	
	Per Customer $	% of Operating Rev.	Per Customer $	% of Operating Rev.	Per Customer $	% of Operating Rev.	Per Customer $	% of Operating Rev.
North Shore Gas Company	5.80	9.60	2.41	4.55	2.52	4.76	3.56	6.71
Western United Gas & Elec. Co.*	5.24	11.50	6.60(a)	14.50(a)	(a)	(a)	2.45	5.40
Pub.Serv. Co. of Northern Ill.*	5.82	10.10	3.06	5.37	3.35	5.88	3.22	5.68
Peoples Gas Light & Coke Co.	3.30	6.66	3.00	6.58	1.87	4.10	3.42	10.10
Milwaukee Gas Light Co.	3.39	10.90	2.02	6.52	1.42	4.60	1.75	5.66
Madison Gas & Elec. Co. *	3.92	9.10	1.45	3.38	0.89	2.06	1.75	4.07
Wisconsin Gas & Elec. Co.*	3.52	9.80	1.75	4.91	0.83	2.32	2.41	6.74
Minneapolis Gas Light Co.	1.20	2.92	4.94	12.00	1.06	3.21	2.71	6.55
Laclede Gas Light Co.	2.51	7.05	1.96	5.67	1.13	3.18	2.66	7.45
Washington Gas Light Co.	4.89	10.60	2.56	5.58	1.97	4.30	3.30	7.18
Brooklyn Union Gas Co.	3.96	12.80	3.93	9.50	1.07	3.45	2.62	8.50
Lowell Gas Light Co.	0.90	2.58	3.76	10.85	1.94	5.08	2.49	7.04
Portland Gas & Coke Co.	3.26	7.98	2.79	6.84	3.16	7.73	2.55	6.23
Group Average	3.67	6.42	2.81(b)	6.82(b)	1.77(b)	4.23(b)	2.69	6.72

Notes:

* - Operate Electric Utility jointly with Gas Utility
(a) - Sales promotion expenses included in Customers' Accounting & Collection
(b) - Excludes Pub. Serv. Co. of Northern Illinois

Above figures are based on 1939 operations except Western United Gas & Electric Company (1937) and Public Service Company of Northern Illinois (1938).

be developed. The maintenance expense component of the transmission and distribution expense item also will normally vary from year to year, as maintenance is an item of periodic nature. In addition, a portion of this expense is independent of the number of customers served, and when reduced to a per customer basis will vary from one company to another according to variation in customer density. Customers' accounting and collection expense is closely proportionate to the number of customers served. Sales promotion expense depends largely upon company policy, but assuming uniform policy with respect to the effort applied to the building of business, this item should be closely proportionate to the number of customers served. The administrative and general group of accounts includes many items of miscellaneous nature, some of which are proportionate to the number of customers and others are not. Another factor to keep in mind in analyzing cost comparisons between companies is that the gas departments of a number of companies have the benefit of joint operation with an electric department and under these circumstances, the unit expenses for combination companies of this type, would be expected to be lower than those incurred by purely gas companies.

It will be noted from the foregoing table that the transmission and distribution expense of North Shore Gas Company is considerably above the average for the group of companies used in the comparison, both on a per customer and on a revenue basis. A considerable part of this variation, however, is due to the much higher pumping and regulator expenses required on a high-pressure system of this kind, and in fact, this component of transmission and distribution expense in 1939 was equivalent to $1.54 per customer. It will be noted further that companies such as Western United Gas and Electric Company and Public Service Company of Northern Illinois which operate transmission systems of a somewhat similar type with that of North Shore Gas Company also have a relatively high transmission and distribution expense per customer which is about in line with the North Shore Gas Company's experience when relative pumping costs and customer density are taken into account. The lower unit costs enjoyed by a number of the other companies are mainly attributable to a much higher customer density and to considerably lower pumping expenses. It appears, therefore, that when examined from the standpoint of fundamental physical factors, the transmission and distribution expenses of North Shore Gas Company are in line with expectations, but it should be noted that because of the nature of its system the company is of necessity confronted with relatively high transmission and distribution expenses. With an increase in customer density in the future, however, this item should be expected to tend downward on a per customer basis.

The company's customers' accounting and collection expense is below the average for the group of companies shown above, although, as will be noted, a number of such companies enjoy a unit expense considerably below such average. Such lower average costs are due in part to joint operation and in part to centralized billing procedures which these companies have adopted. The North Shore Gas Company does not employ centralized billing at this time, and from a limited examination of its accounting procedure, it would seem to us that some savings could be made in customers' accounting expenses if centralized machine billing were to be used. We would recommend that the possibilities of centralized machine billing be given serious study and consideration by the management.

As previously noted, the relative magnitude of sales promotion expense depends largely upon managerial policy, and those companies that conduct aggressive load-building campaigns incur a much higher expense than the less aggressive companies. The final criterion as to this item of expense is the results accomplished, particularly from the standpoint of net operating revenue added by the load-building efforts, and consequently the amounts spent on a per customer basis or in per cent of operating revenue are of secondary importance when viewed in the light of results accomplished. It appears to us that while the sales promotion expenses of North Shore Gas Company are relatively much higher than the corresponding expenditures of a number of other companies, it seems advisable that such expenses should probably be continued at this high level in order to protect the business against competition and to stimulate further usage of gas in the territory. It appears, however, that the sales promotion expenditures of the company should be devoted more to that type of load-building activities that produces more net operating revenue and assures protection against the loss of high-priced business to competition, rather than to the development of marginal profit load. We have particular reference to the relatively high amounts of sales promotion expense that has been incurred in the past for the development of the relatively low-priced house-heating business.

The administrative and general expenses used in the above comparison are only those applicable to the Gas Company and amounted to $96,590 in 1939 as compared with $100,118 in 1938. The combined administrative and general expenses of the system, including those of the Coke Company ($39,674) amounted to $136,264 in 1939 as compared with $165,769 in 1938. The combined 1939 administrative and general expense was equivalent to almost 7% of gross operating revenue. It will be noted from the preceding tabulation that on a customer basis this item of expense is considerably higher than the average for the companies shown, although on a revenue basis it is about in line. One contributing factor to the seemingly higher administrative and general expenses is the rental paid for the various district offices, as this amounted to about $13,860 in 1939 and was equivalent to 14.3% of the total administrative and general expenses of the Gas Company alone. Another contributing factor is the supervision and management fees paid to the Baehr Organization, and these charges in 1939 amounted to $39,646 for the two companies and were equivalent to about 2% of the combined gross operating revenue. These charges, at their 1939 level, appear to be reasonable, in our opinion as, on a revenue basis, they were not much higher than those usually found in the case of mutual service companies of the larger holding company systems. We understand that since January 1, 1937, the charges of the Baehr Organization have been based on the actual cost of the work performed for the various subsidiaries of the North Continent Utilities Corporation, while prior to that time the basis was actual cost, plus 50% for overheads and profit. Incidentally, the various members of the Baehr Organization who are also officers of the two companies involved in the present study do not draw any salaries from the companies, and the above charges represent all of the operating expenses charged to the companies for all operating and management services rendered. Prior to January 1, 1937, however, we understand that Mr. William A. Baehr drew a small salary from the Coke Company and this amounted to $1,200 in 1936, and only to $200 in 1935. Similarly, Mr. William B. Baehr, in 1936, drew a salary of $1,860 from the Gas Company and $1,725 from the Coke Company, while the corresponding 1935 salary figures were $1,860 and $1,620, respectively. We understand that Mr. William B. Baehr also drew small salaries from these two companies during prior years. When the new arrangement was placed in effect as of January 1, 1937, these two officers discontinued drawing any salaries from the two operating companies. The Baehr Organization charges in 1939 were considerably lower than those charged in prior years as will be noted from the following table:

	Baehr Organization Charges			
Year	To Gas Company	To Coke Company	Total	% of Oper. Rev.
1939	$25,068	$14,578	$ 39,646	2.02
1938	34,249	38,112	72,361	3.56
1937	25,674	30,881	56,555	2.47
1936	16,154	35,274	51,428	2.33
1935	21,201	43,720	64,921	3.33
1934	53,233	35,934	89,167	4.61
1933	82,634	19,031	101,665	4.98
1932	96,142	20,437	116,579	5.85
1931	90,198	23,595	113,793	5.62
1930	62,315	31,573	93,888	4.03

Other items of importance included in the administrative and general group of accounts for 1939 were general office salaries of $17,167 and general office supplies and expenses of $16,077 for the Gas Company. The corresponding figures for the Coke Company amounted to $18,654 and $5,110 respectively. The salaries of the local operating officials of the two companies are relatively low. The highest paid operating official of the Gas Company draws a yearly salary of $6,300, while the salary of the next highest paid department head is $4,900. The yearly salary of the highest paid operating official of the Coke Company is $5,400.

Other items of administrative and general expense do not call for special comment.

<u>Maintenance Expenses</u> The various items of expense discussed above include, of course, maintenance expenditures. The maintenance expenses as a whole, have varied during the past five-year period as follows:

Year	Maintenance Expenses: Gas Company	Coke Company	Total
1939	$40,095	$33,488	$73,583
1938	35,456	37,141	72,597
1937	34,037	30,149	64,186
1936	43,001	42,060	85,061
1935	37,235	27,216	64,451

As previously noted, maintenance is an item of periodic nature varying from year to year on that account, and this explains the variations during the above five-year period. The five-year average maintenance expense amounted to about $38,000 annually for the Gas Company, and to about $34,000 for the Coke Company, with a combined average of about $72,000 per year. In terms of the estimated original cost of the properties, exclusive of land, these maintenance expenditures were equivalent to 0.64% for the Gas Company and to 1.23% for the Coke Company, or an average of 0.83% for the combined properties. Insofar as we have been able to observe, these maintenance expenditures have been sufficient to keep the property in good operating condition. As time goes on, however, a gradual replacement of transmission and distribution lines and other equipment will have to be faced, but such replacements are not a maintenance charge and consequently will be reflected in the fixed capital and depreciation reserve accounts, in accordance with prescribed utility accounting procedure.

Incidentally, the extreme cold weather experienced during the past winter season caused frost damage to the pipelines of some gas companies, but we are informed that no such damage of any appreciable nature occurred on the lines of North Shore Gas Company. This companys' lines are installed at a sufficient depth below the street or highway surface so as to insure proper protection against frost. During the 1936 cold spell, however, there was some frost damage to the company's service lines, but this appears to have been of relatively minor nature in comparison with the experience of a number of other gas companies. Such damage as occurred was immediately repaired, and this accounts for the higher maintenance expenditures incurred in 1936, and shown in the above table.

Payroll. Inasmuch as wages and salaries paid to employes constitute a very important element in the expenses discussed above, we are giving below a summary of the payrolls of the two companies for the years 1935 - 1939 inclusive:

	1939 $	1938 $	1937 $	1936 $	1935 $
Payroll Charged to Operation:					
Gas Company	295,050	252,085	294,383	251,118	197,820
Coke Company	189,413	203,500	190,745	175,819	154,707
Total	484,463	455,585	485,128	426,937	352,527
Payroll Charged to Construction:					
Gas Company	22,735	18,143	25,410	34,511	7,482
Coke Company	1,772	505	9,293	1,022	462
Total	24,507	18,648	34,703	35,533	7,944
Total Payroll					
Gas Company	317,785	270,228	319,793	285,629	205,302
Coke Company	191,185	204,005	200,038	176,841	155,169
Total	508,970	474,233	519,831	462,470	360,471
Operating Payroll in Per Cent of Operating Revenue					
Gas Company	20.5	17.9	21.5	18.6	15.0
Coke Company	17.7	16.9	12.8	13.1	13.7
Combined	24.7	22.5	21.2	19.4	18.1
Operating Payroll in Per Cent of Operating Expenses Excl. Taxes and Depreciation					
Gas Company	28.3	23.6	27.9	27.1	21.4
Coke Company	23.9	23.0	19.4	18.5	17.2
Combined	38.4	34.4	33.5	31.4	27.3
No. of Employes at Year-End					
Gas Company	203	198	173	179	166
Coke Company	124	119	117	118	110
Total	327	317	290	297	276

It will be noted that only a relatively small portion of the total payroll was charged to construction, and this is accounted for by the fact that the companies have not been confronted with heavy construction programs during recent years. The relatively high construction payroll of the Coke Company in 1937 reflects the construction of the producer gas plant in that year. It appears that during years of relatively high construction activity an appreciable portion of the time of some of the operating employes would be charged to construction as such employes can be switched to construction work, at least during a part of the construction season, and this would reduce the operating payroll to some extent.

It will be noted that between 1935 and 1939 the total payroll of the Gas Company increased 55%, while the corresponding increase in the case of the Coke Company amounted to about 23%. These increases reflect partly adjustments in wages and hours in order to comply with the N.R.A. and other Federal legislation. The shortening of hours accounts to a large extent for the increase in the number of employes shown in the table above. In addition, a part of the increase in the operating payroll of the Gas Company is due to the increase in load-building efforts whereby both the number of sales promotion employes as well as the commissions paid to them showed a relatively substantial increase. The 1939 operating payroll figures, for example, include salaries of $10,784 paid to salesmen, as well as $38,765 commissions and bonuses paid to salesmen and other employes in connection with the Gas Company's load-building program.

The last general wage increase was placed in effect in May, 1937, and amounted to about 5% for the monthly employes and to about 7-1/2% for the hourly employes, and this accounts for the increase shown above in the 1937 payroll as compared with 1936. It appears, however, that the companies have been able to exercise good control over the payroll through occasional layoffs. We understand that some wage adjustments are now under negotiation between the companies and the operating employes, but these are not likely to exceed $20,000 and a considerable portion of such an increase is likely to be offset by readjustments in the operating personnel. The operating employes of both companies are not affiliated with either the C.I.O. or the American Federation of Labor, and the companies apparently have been able to get along without any labor difficulties. On the whole, the monthly wage scales of the companies are in line with wages paid by other employers within the territory served, but the wage rates of some of the hourly gas plant employes are somewhat below those paid by other nearby gas companies.

With reference to the above table, particular attention is directed to the figures showing the operating payrolls as a percentage of operating revenues and operating expenses, respectively. These percentages give a good indication as to the extent to which operating revenues must be increased in order to absorb a given percentage of wage increases. For example, on the basis of 1939 operating conditions a general wage increase of, say, 5% for the system as a whole could be offset by an increase of only 1.24% in gross operating revenue, and likewise a wage increase of this magnitude could be offset by a decrease of only 2.74% in other operating expenses, excluding taxes and depreciation. On the whole, while the operating payroll of this system is relatively substantial in relation to the other costs of doing business, as well as in terms of operating revenues, the ratios appear to be in line with the usual experience of manufactured gas companies. Furthermore, the North Shore System can absorb a considerable increase in business without increasing the present personnel, and it seems to us that through a better centralization of customers' accounting and other commercial functions, the present payroll could probably be reduced to some extent.

Taxes. Total taxes of the Gas Company in 1939 amounted to $112,738, including $11,884 of income taxes and were equivalent to 7.83% of gross operating revenue. The corresponding taxes of the Coke Company amounted to $55,394, including $18,332 of income taxes, and the total tax burden of that company was equivalent to 5.2% of gross operating revenue including gas sales to the Gas Company. On a combined basis, the tax burden of the system was equivalent to 8.5% of gross operating revenue, including coke sales, and to 11.5% of gas operating revenues alone, and was likewise equivalent to 1.85% of the estimated original cost of the property. The latter two figures give a much better basis of comparing the tax burden of the system with that of other gas utility companies, and such comparison indicates that on a combined system basis the tax burden of the North Shore companies is about in line with average experience. As previously noted, on Page 50 of this report, the tax burden of the system showed a sharp increase between 1933 and 1939, but this was in line with the general experience of the utility industry.

Depreciation. The annual depreciation charges of the Gas Company are based on an order issued by the Illinois Commerce Commission on December 30, 1920, which order specified that the company set up an annual depreciation charge of $35,000, plus 1.75% on all net additions and betterments made to the property subsequent to December 31, 1920. The 1939 depreciation charge which amounted to $112,287 was equivalent to about 1.9% of the original cost of the depreciable tangible property and appears to be adequate, in our opinion, in relationship to the long-term requirements of the property. The charges for the prior years also appear to be adequate, and therefore no adjustment need be made for inadequate depreciation in the actual depreciation charges of the Gas Company shown in the previously presented 11-year income account. It should be noted, as a matter of interest, that the depreciation charged to operations during the past 5-year period was identical with that allowed for Federal income tax purposes. The company claimed somewhat higher depreciation charges on its income tax return for the years 1935 - 1938 inclusive, but these were disallowed by the examiner of the Bureau of Internal Revenue and were reduced to the amounts actually shown in the income account.

As will be noted from the 11-year income account table previously presented, the depreciation charges of the Coke Company have varied widely during the period under review. The company's depreciation charge for 1930 was about $80,000, but this was reduced to $48,000 for each of the years 1931 - 1936 inclusive, and then was raised to $60,000 annually for the year 1937 and subsequently. For income tax purposes, the Coke Company has been allowed an annual depreciation credit of $80,000 throughout the period under review. Taking into account the type of property owned and its long-term depreciation requirements, it appears to us that an annual depreciation charge of about $69,000 for the Coke Company would be more in line with conservative accounting practice, and we would make a corresponding adjustment in considering the reported net earnings of the company.

COMPETITIVE SITUATION AND PROSPECTIVE EARNINGS

In order to arrive at conclusions as to the future trend of earnings of the gas utility operations, it becomes necessary to examine the company's sales promotion activities, the losses of load to competition, the saturation of the existing market, and the competitive position of the present gas rate structure. The results of our analysis of these and other related factors are summarized below.

Appliance Sales & Load Building The following tabulation gives the Gas Company's gross merchandise and jobbing sales, and the net cost of sales promotion by years for the period 1930 - 1939 inclusive.

Year	Total Sales	Sales per Meter	Net Cost of Sales Promotion	Net Cost of Sales Promotion per Meter
1939	$237,396	$ 8.76	$68,490	$2.52
1938	159,956	6.02	66,834	2.52
1937	338,419	12.81	55,301	2.09
1936	248,638	9.67	9,845	.39
1935	201,040	8.02	23,079	.92
1934	129,930	5.36	49,920	2.07
1933	82,138	3.46	46,511	1.96
1932	70,042	2.94	38,998	1.64
1931	120,733	4.99	38,170	1.57
1930	187,549	7.46	24,867	.99

Due to changes made in the classification of accounts, the merchandise sales as shown on the company's books do not now include water heaters and conversion burners installed on customers' premises on a rental basis. In addition, under the old classification in effect prior to January 1, 1938, the cost and charges for repairs to customers' appliances were included in merchandise sales, whereas since January 1, 1938, these items are charged to operating expenses. In order to put the figures on a comparable basis throughout the period covered by the above table, and owing to the fact that a majority of appliances put out on a rental basis result in actual sales, we have included the sales price of such rental appliances in the above total sales figure and have likewise included the work on customers' premises.

It will be observed, from the above table, that total merchandise and jobbing sales showed a consistent increase from the low point of $2.94 per meter reached in 1932, to a peak of $12.81 per meter in 1937. In 1938 such sales dropped to $6.02 per meter, which is about one-half of the 1937 unit sales figures and then recovered to $8.76 per meter in 1939, but this was still about 30% below the 1937 peak figure.

The net cost of sales promotion shown above is a net figure obtained by deducting the net profit on merchandise sold from gross sales promotion expense incurred in the development of new business. The gross sales promotion expense figures, and the corresponding net profit on merchandise sales, are shown in the following table:

	Gross Sales Promotion Expense		Net Profit on Merchandise	
Year	Amount	Average Per Meter	Amount	% of Gross Merchandise Sales
1939	$109,866	$4.05	$41,376	20.3
1938	78,654	2.96	11,821	8.4
1937	105,398	3.99	50,096	17.5
1936	69,712	2.71	59,867	24.1
1935	69,164	2.76	46,085	22.9
1934	75,903	3.13	25,983	20.
1933	64,979	2.74	18,468	22.4
1932	52,626	2.21	13,628	19.4
1931	64,789	2.68	26,619	16.5
1930	67,632	2.69	42,765	22.7

The net profit on merchandise shown above was derived by deducting from gross merchandise and jobbing sales the cost of appliances and material, the labor and other installation expenses, a small storeroom handling charge equivalent to about 1% of the cost of material or appliances, the clerical salaries, and the uncollectible accounts and losses on rental installations repossessed. The salaries of the commercial department supervisors and the salaries and commissions paid to salesmen on appliances sold are included in sales promotion expense. The above method of accounting does not give a true picture, and it appears that, after allowing for salaries and commissions and other expenses chargeable to merchandising, the company's merchandising activities have been carried at a small loss. This, however, is not an unusual situation, as many other utility companies have experienced similar losses on their merchandising operations. The sharp drop in net profit on merchandise sales experienced in 1938, as shown in the table above, was primarily the result of a corresponding sharp drop in gross sales, which was accompanied by a large reduction in gross sales promotion expense, as compared with 1937. As will be noted from the above figures, the corresponding net cost of sales promotion of $66,834 in 1938 was actually higher than the 1937 figure of $55,301 which had the benefit of a much higher gross merchandise sales volume. Similarly, in 1936 when a large volume of gross merchandise sales was enjoyed, the net cost of sales promotion amounted to only $9,845 in spite of the fact that gross sales promotion expense amounted to $69,712 in that year. The latter figure was reduced to a net sales promotion cost of $9,845 by the offsetting net profit of $59,867 on merchandise sales.

In general, the above tables show that, while the company's yearly gross sales promotion expense has been large, the net cost of sales promotion is influenced to a very large extent by the volume of gross merchandise sales, and during years when the gross merchandise sales are high the company's net sales promotion expense is correspondingly reduced on account of the higher net profit on merchandising and jobbing activities. The gross sales promotion expense has increased consistently during recent years with the exception of 1938, and reached a new high in 1939. The net cost of sales promotion has also shown considerable increase subsequent to 1936. This is largely due to fluctuations in gross merchandise sales and net profit on such sales as previously noted. In general, it appears that the most effective means for keeping the net cost of sales promotion down is by increasing the volume of merchandise sales. The latter, of course, is also of great importance from the standpoint of increasing the volume of gas sales and protecting the company's load against inroads by competing fuels.

The following table gives the number of major gas appliances sold during the past five-year period:

	1939	1938	1937	1936	1935
Ranges	1219	835	1271	1216	1010
Refrigerators	337	219	478	391	292
Side-Arm Water Heaters	27	43	82	108	122
Automatic Water Heaters	864	497	730	361	319
Central House Heating Jobs	195	133	415	73	80
Auxiliary Space Heating Equip.	51	43	99	35	28

The above figures include appliances sold direct by the company's own sales force as well as most of the appliances sold by a number of co-operating dealers and plumbers under a cooperative plan which will be discussed subsequently. In addition, however, there was a considerable number of gas appliances, particularly ranges, sold by other dealers in the territory which are not included in the above figures.

With reference to the above tabulation, particular attention is called to the large increase in the number of automatic water heaters, refrigerators and central house-heating installations in 1937 and subsequently. As previously noted, the company reduced its water-heating and house-heating rates in 1937 and this, together with an aggressive load-building campaign, was partly responsible for the large increase in the number of units sold.

Another factor responsible for the increased sales during recent years was the resumption of new building construction activity in the territory. An analysis of the company's new building reports shows that the division of the cooking, water-heating, refrigeration and space-heating loads among the various competitors was as follows for the new buildings completed since January 1, 1937:

Equipment	First 3 mos. of 1940 Number	First 3 mos. of 1940 % of total	Year 1939 Number	Year 1939 % of total	Year 1938 Number	Year 1938 % of total	Year 1937 Number	Year 1937 % of total
Ranges								
Gas	45	84.9	188	77.7	141	78.8	195	80.3
Electric	8	15.1	37	15.3	6	3.3	34	14.0
Oil	-	-	3	1.2	31	17.3	1	0.4
None or Undecided	-	-	14	5.8	1	0.6	13	5.3
Total	53	100.0	242	100.0	179	100.0	243	100.0
Water Heaters								
Gas	32	60.5	141	58.3	108	60.3	131	53.9
Electric	6	11.3	20	8.3	15	8.4	15	6.2
Oil (Water Heaters)	4	7.5	7	2.9	5	2.7	37	15.2
Oil (B & G Attachments*)	4	7.5	17	7.0	15	8.4	13	5.4
Solid Fuel	3	5.7	20	8.3	13	7.3	28	11.5
None or undecided	4	7.5	37	15.2	23	12.9	19	7.8
Total	53	100.0	242	100.0	179	100.0	243	100.0
Refrigerators								
Gas	11	20.7	53	21.9	29	16.2	35	14.3
Electric	39	73.6	150	62.0	121	67.6	164	67.5
Ice	2	3.8	15	6.2	22	12.3	22	9.1
None or undecided	1	1.9	24	9.9	7	3.9	22	9.1
Total	53	100.0	242	100.0	179	100.0	243	100.0
House Heating								
Gas	19	35.8	105	43.4	63	35.2	83	34.2
Oil	20	37.8	66	27.3	52	29.0	93	38.2
Solid Fuel	14	26.4	62	25.6	51	28.5	62	25.5
None or undecided	-	-	9	3.7	13	7.3	5	2.1
Total	53	100.0	242	100.0	179	100.0	243	100.0

Note:- * B & G denotes Bell & Gossett attachments, which are connected to house-heating oil burners and furnish hot water service from the oil burner throughout the year.

The above table shows that for the period January 1, 1937 to March 31, 1940 about 82.6% of the cooking load went to gas, 12.3% to electricity, and 5.1% to other fuels. The corresponding division of the water-heating load was 65.1% gas, 8.8% electric, 16% oil, and 10.1% solid fuel. In the refrigeration field, the Gas Company was able to obtain 19.3% of the total load, while 71.5% went to electricity and 9.2% to ice. The new house-heating load was divided 39.2% gas, 33.4% oil and 27.4% solid fuel, i.e., coal or coke. While the company has been able to secure a good share of the load in new homes, the significant thing disclosed by the above figures is that the relative proportion of the cooking and water-heating load which went to electric and oil competition was much greater than would be expected. For example, another nearby gas company which we studied was able to secure 88.3% of the total cooking load in new homes in 1939, while the electric competitor obtained only 10.7% of such load. Similarly, this other gas company obtained 63.8% of the new water-heating load, while the proportion going to the competitors was 1.1% electric, 1.3% oil, and 33.8% solid fuel. The North Shore Gas Company, on the other hand, was able to secure a much greater proportion of the new refrigerator load than the other gas company; the latter obtained only 12.4% of the refrigerator load, whereas North Shore Gas Company was able to obtain 19.3% of the total refrigerator load in new homes built in its territory during the period under review. The rates of tho other gas company are considerably lower and by far more promotional than the rates of North Shore Gas Company and this probably accounts for the relatively large proportion of the water-heating load that went to electric and oil competition in the North Shore Company's territory.

On the whole, it appears to us that the company's appliance sales efforts have been comparatively satisfactory, particularly in view of the fact that existing gas rates are not as competitive or as promotional as would be desired. It should be noted, however, that a large proportion of the total range sales during the above five-year period represented replacements of old equipment and this did not increase the gas consumption. In fact, the new gas ranges often result in a decrease in gas consumption owing to their much higher efficiency of gas utilization as compared with the much lower efficiency of the old ranges which they replace. However, while the replacement of old ranges is not beneficial from the standpoint of net operating revenue, particularly when the concomitant sales promotion expense is taken into account, the fact remains that this activity is absolutely essential as a protection measure against competition, because when a customer acquires a new gas range he is no longer apt to switch over to electric cooking, at least for years to come. A relatively large number of automatic water heater sales also represented replacements of old water heaters and probably did not add much load. For example, such replacements were equivalent to about 22% of the total automatic water heater sales in 1939, about 33% in 1938, and 40% in 1937. A considerable portion of the gas sales efforts and sales promotion expense was devoted to development of house-heating business which, as previously noted, yields a relatively small gain in net operating revenue in relationship to the corresponding increase in the volume of gas sales and the additional production, transmission, and distribution capacity utilized in order to serve this type of load, particularly during peak load periods.

Loss of Load <u>to Competition</u>. In so far as the over-all net results are concerned, the new business development efforts of the company discussed above have been offset, to a considerable extent, by losses of load already on the lines to competitors and this was particularly serious in the case of water-heating load. The company has been very cognizant of this situation and from time to time has kept track of the number of water heaters as well as the corresponding monthly gas consumption lost to competition. From an analysis of the company's water-heating reports covering the period August 22, 1931 to December 31, 1939, the water-heating load lost to competition was approximately as follows:

	1939	1938	1937	1936	1931-35	Total
No. of Water Heaters Lost						
To Oil	17	44	39	94	574	768
To Coal	9	25	37	29	145	245
To Electricity	54	54	54	7	13	182
Total	80	123	130	130	732	1195
Gas Volume Lost - Mcf/mo.						
To Oil	121.4	448.1	367.5	701.6	5641.2	7279.8
To Coal	17.3	136.9	122.3	94.1	785.6	1156.2
To Electricity	133.3	164.9	202.3	44.7	263.6	808.8
Total	272.0	749.9	692.1	840.4	6690.4	9244.8
Average Monthly Consumption per Water Heater Lost - Mcf						
To Oil	7.14	10.18	9.42	7.46	9.83	9.48
To Coal	2.40	5.48	3.31	3.24	5.42	4.72
To Electricity	2.47	3.24	3.75	6.39	2.02	4.44
% of No. of Jobs Lost						
To Oil	21.3	35.8	30.	72.3	78.4	64.3
To Coal	11.2	20.3	28.5	22.3	19.8	20.5
To Electricity	67.5	43.9	41.5	5.4	1.8	15.2
% of Gas Volume Lost						
To Oil	44.6	59.7	53.1	83.5	84.3	78.8
To Coal	6.4	18.3	17.7	11.2	11.7	12.5
To Electricity	49.0	22.0	29.2	5.3	3.9	8.7

According to the above analysis, the company lost about 1195 water heaters to competition between 1931 and 1939, representing an average monthly consumption of 9,244,800 cu. ft. Most of the water heaters lost apparently were of the automatic type, as out of a total of 1195 jobs lost, only 146 were specifically identified as side-arm heaters in the company's water-heating reports. It will be noted further that the water heaters lost to competition during the period under review represented large users, as the composite average monthly consumption per water heater lost was in the neighborhood of 7,100 cu. ft. The largest consumers switched to oil while the smaller consumers went over to coal or electricity. During the entire period covered by the above table, it will be noted that oil competition accounted for 64.3% of the total number of water heaters lost, while coal accounted for 20.5%, and electricity for 15.2%. From a standpoint of m.c.f. volume of gas lost, oil competition accounted for 78.8%, coal for 12.5%, and electricity for 8.7%. It is significant to note, however, that electric competition in the water-heating field has been gaining momentum, particularly during the past three years among the smaller consumers. For example, in 1936 electric competition accounted for only 5.4% of the total number of jobs lost and for only 5.3% of the corresponding volume. These figures increased to 67.5% and 49%, respectively, in 1939. On the other hand, the losses to oil and coal competition have been in a downward trend during recent years, although the corresponding load lost to these competitors is still relatively appreciable.

The following tabulation gives a further breakdown of the estimated monthly gas consumption of the water-heating load lost to competition between August 22, 1931 and December 31, 1939, by districts, showing the m.c.f. volume lost as well as the percentage of such volume lost to oil, coal, and electricity, respectively. The breakdown is as follows:

	Estimated Monthly Gas Consumption Lost							
	To Oil		To Coal		To Electricity		Total Dist. Loss	
District	M.c.f.	% of total	M.c.f.	% of total	M.c.f.	% of total	M.c.f.	% of total
Waukegan	216.6	36.5	172	29.0	205.3	34.5	593.8	100.0
Lake Forest	1210.9	91.4	80	6.0	34.6	2.6	1325.5	100.0
Highland Park	1426.7	66.8	525.1	24.6	186.2	8.6	2138.1	100.0
Winnetka	4392.7	86.8	339.2	6.7	330.2	6.5	5062.1	100.0
Libertyville	32.9	26.2	39.9	31.8	52.5	42.0	125.3	100.0
Total all Districts	7279.8	78.8	1156.2	12.5	808.8	8.7	9244.8	100.0

It will be observed that the losses of water-heating load to other fuels have not been uniform between the various districts. The percentage of loss to oil has been the highest in all districts with the exception of Libertyville whose highest loss was to electric competition. It will be further observed that electric competition has also been a large factor in the Waukegan district, whereas oil competition accounted for the biggest share of the loss in the Lake Forest, Highland Park, and Winnetka districts with coal competition next in importance. A further examination of the losses incurred in the various districts indicates that the inroads of oil competition were particularly severe in the Winnetka and Highland Park Districts during the years 1932 - 1933. During that two-year period, about 75% of the total number of jobs lost and more than 76% of the corresponding gas volume in the company's entire territory were accounted for by losses to oil competition in the Winnetka and Highland Park districts alone.

It appears that during the above two-year period the Winnetka and Highland Park districts were subjected to aggressive campaigns on the part of the oil burner dealers. While the effect of oil competition has not been as pronounced during recent years, it seems to us that this competition is likely to continue to make appreciable inroads into the company's water-heating business, and with recent improvements in the efficiency of oil water heaters, the competitive situation could conceivably become more serious as time goes on unless it is met by a more competitive gas rate structure.

In conclusion it may be of interest to note that the loss of the water-heating load discussed above is equivalent to an annual gross revenue loss somewhere between $90,000 and $100,000 on the basis of present rates charged for this class of service, while the corresponding loss in net operating revenue is equivalent to about $50,000 on an annual basis.

In view of the fact that electric competition has shown a relatively sharp increase during recent years, we made a further analysis of available data in order to show the effect of electric competition on the existing cooking and water-heating load of the Gas Company in the various operating districts. The available data cover the period January 1, 1937 to March 31, 1940, and the results of this analysis are presented in the accompanying table.

The table in question shows the number of electric ranges and water heaters that have replaced gas ranges and water heaters in the period under review, and likewise shows the number of electric ranges and water heaters that the Gas Company has been able to replace with gas equipment during the same period. As will be noted from the tabulation, the Gas Company sustained a net loss of 299 ranges to electric competition between January 1, 1937 and March 31, 1940. The Waukegan district accounted for over 64% of the total net loss. Similarly, during the same period, the company sustained a net loss of 201 water heaters to electric competition and the Waukegan district alone again accounted for almost 59% of this total loss. The relatively large loss which occurred in the Waukegan district is rather significant in that the average spendable money income per family in that area is considerably lower than that found in the southern districts, and one would normally expect that electric cooking and water-heating competition would be less severe in the Waukegan district on that account. It appears, however, that this is not at all the case, and the Waukegan territory at present gas and electric rate levels is a fertile field for electric competition, particularly if the competing electric utility were to increase its sales promotion efforts among the medium size families of better than average income. The relatively smaller progress made by electric competition in the high income districts such as Lake Forest, Highland Park and Winnetka, is probably explained by the fact that most of the homes in these districts are relatively large and their gas consumption is such as to give them the benefit of the lower steps of the various optional gas rates, with the result that

EFFECT OF ELECTRIC COMPETITION ON EXISTING COOKING AND WATER HEATING LOAD OF NORTH SHORE GAS COMPANY

	District					
	Waukegan	Lake Forest	Highland Park	Winnetka	Libertyville	Total
COOKING LOAD						
First 3 Months of 1940						
Elec. Ranges Replacing Gas	14	1	2	4	1	22
Gas Ranges Replacing Elec.	6	2	6	1	1	16
Net Loss to Elec. Competition	8	1*	4*	3	0	6
Year 1939						
Elec. Ranges Replacing Gas	59	5	4	12	5	85
Gas Ranges Replacing Elec.	17	2	3	4	1	27
Net Loss to Elec. Competition	42	3	1	8	4	58
Year 1938						
Elec. Ranges Replacing Gas	77	16	14	11	7	125
Gas Ranges Replacing Elec.	15	0	5	5	4	29
Net Loss to Elec. Competition	62	16	9	6	3	96
Year 1937						
Elec. Ranges Replacing Gas	97	9	32	13	14	165
Gas Ranges Replacing Elec.	17	2	2	2	3	26
Net Loss to Elec. Competition	80	7	30	11	11	139
Total Net Loss to Electric Competition-Jan.1, 1937 to March 31, 1940	192	25	36	28	18	299
WATER HEATING LOAD						
First 3 Months of 1940						
El. Water Heaters Replg. Gas	5	0	1	2	3	11
Gas Water Heaters Replg. El.	0	0	0	0	1	1
Net Loss to El. Competition	5	0	1	2	2	10
Year 1939						
El. Water Heaters Replg. Gas	41	2	9	6	1	59
Gas Water Heaters Replg. El.	1	0	0	0	0	1
Net Loss to El. Competition	40	2	9	6	1	58
Year 1938						
El. Water Heaters Replg. Gas	40	1	14	9	1	65
Gas Water Heaters Replg. El.	0	0	0	0	1	1
Net Loss to El. Competition	40	1	14	9	0	64
Year 1937						
El. Water Heaters Replg. Gas	32	2	23	6	6	69
Gas Water Heaters Replg. El.	0	0	0	0	0	0
Net Loss to El. Competition	32	2	23	6	6	69
Total Net Loss to Electric Competition-Jan. 1, 1937 to March 31, 1940.	117	5	47	23	9	201

* Net Gain.

the average price paid for gas is more competitive with electricity as compared with the situation found in the case of smaller users. Another factor that probably accounts for the better progress made by electric competition in the Waukegan area is that the competing electric utility company has about 300 employees in the City of Waukegan, and consequently a number of the present electric cooking and water heating users are undoubtedly employees of the electric company. At any rate, as will be noted from the aforementioned tabulation, the electric cooking and water-heating competition has been making inroads into the Gas Company's business during recent years, and while the losses already sustained are not of alarming nature in comparison with the experience of other gas companies, it is our feeling that this form of competition can become more serious in the future, particularly if the competing electric utility were to intensify its sales promotion program. It further appears to us that the Gas Company's existing rate structure is rather weak from a competitive angle, and this factor will be discussed in considerable detail under a subsequent heading of this report.

Incidentally, the electric water heater figures shown in the aforementioned tabulation are larger than those previously shown on the basis of the analysis of the company's water heater reports. The figures disclosed by the latter reports apparently are in error, and we are inclined to rely on the higher figures. As of the end of March 1940, there was a total of 329 electric water heaters in service within reach of the Gas Company's lines, and of this total 152 electric water heaters were in the Waukegan district, 14 in the Lake Forest district, 87 in Highland Park, 60 in Winnetka, and 16 in the Libertyville district. The corresponding electric ranges as of the same date amounted to 765 and were distributed 467 in the Waukegan district, 35 in Lake Forest, 104 in Highland Park, 116 in Winnetka, and 43 in the Libertyville district. By the end of May 1940, the number of water heaters showed an increase to 341 units, and the ranges to 782, showing a net increase of 12 electric water heaters and 17 electric ranges during the two-month period. Incidentally, about 200 of the electric ranges now in service in the Waukegan district were installed in Zion prior to the time when the company started distributing gas in that community in 1930, and in reality, therefore, these do not represent losses to electric competition.

The company has been doing a comparatively good job in connecting Electrolux gas refrigerators to its lines, as noted from a previous tabulation. It is of interest to note, in that connection, that the company has been successful in replacing a considerable number of electric refrigerators and such replacements amounted to 71 units in 1937, 100 units in 1938, and 128 units in 1939. This is a relatively good record, particularly in view of the fact that the present rates of the company do not offer much inducement from the standpoint of competitive operating costs to the refrigerator owner, and, in addition, the purchase price of the gas refrigerator unit is higher than that of the electric refrigerator. We understand that there is a large number of old electric refrigerators in the territory that are good prospects for replacement in the not far distant future, and it seems to us that, with a more promotional gas rate coupled with an aggressive sales campaign, many of such refrigerators could be replaced with gas units.

It may also be of interest to note the relative loss of gas house-heating installation to other fuels. Between 1932 and 1939, the company attached 1,012 central house-heating jobs to its lines, while during the same period it lost 228 jobs to other fuels making a net gain of 784 installations. Thus, the jobs lost to other fuels were equivalent to about 22½% of gross sales. Losses to competing fuels reached a high of 35 jobs in 1934, but during the past three years have varied between 16 and 19 jobs annually. On a percentage basis, the loss of house-heating jobs to competing fuels was relatively heavy during the depression period, and this indicates that during periods of prolonged economic stress the house-heating load of the company would probably show considerable instability as there would be a tendency for people to switch back to cheaper forms of heating in order to effect economies under such conditions. As of the end of March 1940, the company had 1,116 active house-heating installations on its lines, including 179 conversion burners on a rental basis. These rental installations were equivalent to only 16% of the total number of active jobs on the system and this is a relatively favorable ratio.

Sales Organization & <u>Promotional Methods.</u> The local sales organization of the Gas Company is under the direct supervision of Mr. George C. Klopf, Commercial Manager. He has been serving in that capacity for the past five years, and prior to that time he was connected with the Baehr Organization in the capacity of Commercial Manager since about 1926. Between 1919 and 1926 he was engaged in sales work on various operating properties of North American Power & Light Company, particularly Illinois Power & Light Corporation, in which Mr. William A. Baehr had an interest. After Mr. Baehr sold out his interest in the North American Power & Light system, Mr. Klopf was transferred to the Baehr Organization. Mr. Klopf originally started in the utility business as an employee of Peoples Gas Light & Coke Company, and when he left that company in 1919 to go with the North American Power & Light Company properties, he was the manager of one of the large district stores of Peoples Gas Light & Coke Company. Mr. Klopf's sales experience is quite extensive and he has kept abreast with modern merchandising methods. He has a pleasing personality, and our observations lead us to believe that he is a good coordinator. He is about 57 years old.

In addition, the load-building activities of the Gas Company are supervised by Mr. H. S. Oyen, Commercial Manager of the Baehr Organization, who also renders similar supervisory services to other subsidiaries of North Continent Utilities Corporation. Mr. Oyen, who is 41 years old, has been serving in his present capacity since June, 1936, and prior to that time he was in the employ of Central

Illinois Electric & Gas Company, as Sales Supervisor, for seven years. He outlines the various sales campaigns and promotional methods, and supervises their operation through contact with Mr. Klopf, but before being placed into effect, the various sales programs must first receive the approval of Mr. William A. Baehr. In our opinion, Mr. Oyen is a capable sales organizer and well informed on load-building methods.

It seems to us, however, that from the standpoint of effective supervision and performance, the present setup results in some duplication of effort and does not afford as good a degree of coordination and centralization of authority as would be desired. The local Manager of the Gas Company apparently has only very limited control over the load-building organization and is not very active with respect to the sales promotion program. Most of his time is devoted to the supervision of the physical operations of the property and to public relations, particularly in the Waukegan District. Under the present setup the responsibility and authority of the local Commercial Manager of the Gas Company also appears to be somewhat limited. While, as previously noted, the company's appliance sales efforts have been comparatively satisfactory, it seems to us that the load-building program could be improved still further by centralizing the authority and responsibility as to this function under strong and load-building minded local management.

The company maintains a separate sales force in each of the various operating districts and the salesmen work under the supervision of the local district superintendents, who also supervise the local merchandise appliance sales stores and other operations of their respective districts. The number of outside salesmen employed has varied from year to year. In 1935, for example, the company had 12 such salesmen, and this number was increased to 14 in 1936, and to 15 in 1937. Subsequently the sales force was reduced to 13 in 1938 and then increased to 17 in 1939. In May, 1940, the company, in an effort to reduce new business promotion cost by about $30,000 per year, reduced its sales force by laying off 7 salesmen. This represents a cut of 3 salesmen in the Waukegan District, 2 salesmen in the Highland Park District, and 2 salesmen in the Winnetka District. As a result, the present sales force consists of 3 domestic salesmen in the Waukegan District, 1 in the Lake Forest District, 2 in the Highland Park District, 2 in the Winnetka District, and 1 in the Libertyville District. In addition, there is 1 new building salesman in the Winnetka District who covers the new homes being built, both in the Winnetka District and Highland Park District, whereas prior to May, 1940, the Highland Park District had a new building salesman of its own. The company also employs an industrial sales engineer, one house-heating engineer, and one assistant house-heating and commercial engineer. These men headquarter at Waukegan, but their services are available to the entire territory served. There is also a home economist at Waukegan who covers the Waukegan, Libertyville and Lake Forest Districts, and another home economist at Winnetka who covers the Winnetka and Highland Park Districts.

The engineers and home economists are on a straight salary basis, while the salesmen work on a salary and commission basis. Prior to the recent change, the compensation of the domestic salesmen was based on a salary of $1.50 per day, plus a commission of 12½ per cent on the sales price of the appliances. In connection with the recent change, however, the salary was raised to $2 per day, but the commission was reduced to 10 per cent. On automatic water-heater sales the salesmen get a flat commission based on the size of the water heater rather than on the sales price and this, we believe, is a desirable arrangement as it recognizes the amount of gas load added by the appliance to the system. The water-heater commissions are as follows:

Size of Water Heater	Commission per Unit
30 Gallons or Less	$10.00
31 to 65 Gallons	12.50
Over 65 Gallons	15.00

Identical commissions to the above are paid to cooperating plumbers on automatic water heaters sold by them and representing new installations. When the water heaters sold are replacements of all units the commissions are smaller, varying from $5.00 to $7.50 per unit.

On house-heating conversion burner sales the domestic salesmen now get a flat commission of $10.00 per job, as compared with a $40.00 commission formerly paid. Up to some time ago the company was also paying a $10.00 bonus to employees on house-heating prospect leads resulting in actual sales, but this bonus was also discontinued. In view of the relatively unprofitable nature of the house-heating load under existing conditions, the above reductions are a step in the right direction, in our opinion, as the house-heating load development expense under the previous arrangement was relatively high.

The domestic salesmen's compensation plan also provides special inducements in the form of a bonus for turning on automatic water heaters which have been out of service, for removals of furnace water-heating coils, and for replacing electric ranges, water heaters and refrigerators with gas equipment. In connection with the replacement of electric appliances, the company offers special trade-in allowances to the customers on the electric equipment removed. The company recently started interviewing the electric range and water-heater users in order to ascertain the reason why these customers went to electric service. This information is obtained when the salesman calls on such customers for the purpose of trying to change them over to gas service and in reality does not involve additional expense. The information obtained should prove valuable in connection with shaping the company's future load-building policies.

Bonuses are also paid to salesmen for converting the time-payment appliance sales to cash sales.

In general the salesmen's compensation plan has been carefully worked out and is in keeping with modern practices. In spite of the relatively low basic salaries in comparison with those paid by other companies, the domestic salesmen of North Shore Gas Company have shown superior earning power and their total earnings in 1939 averaged in excess of $220 per month, with earnings of some of the salesmen exceeding $250 per month and running as high as $320 per month. This indicates that the salesmen employed are good producers.

The company also pays bonuses to employees for prospects which result in sales of appliances. The employees get a bonus of 1% on all domestic sales, except a flat bonus of $3.00 on automatic water heaters. The employees also receive a bonus of $2.50 for each lead that results in the replacement of an electric range with a gas range.

The company follows a liberal installment-plan policy, the down payments on appliances are reasonable, and the carrying charges on time sales are equivalent to 6 per cent per annum on the initial unpaid balance. Time payments on water-heater sales are spread over a five-year period, while the corresponding maximum time allowance on other appliances is four years for refrigerators, four years for "Certified Performance" ranges, and three years for standard ranges. Tank water heaters equipped with remote control may be sold on an 18-month maximum basis, while the time limit on this appliance where no remote control is installed is 12 months. Conversion burners may take a maximum of 36 months for time payments after one year's trial. Customers purchasing more than one appliance within a given time limit are allowed a discount on the additional appliance. In addition, in connection with special sales campaigns, particularly on refrigerators, the company offers a bonus to any customer who furnishes a prospect which develops into a sale. In our opinion, the setup governing the sale of appliances on the installment plan and other related matters is in keeping with modern practices in the industry and has been carefully planned.

The company has a group of "cooperating" appliance dealers - 6 in the Waukegan District, 2 in the Lake Forest District, 3 in the Highland Park District, 4 in the Winnetka District and 4 in the Libertyville District. These dealers receive merchandise from the company on consignment and are paid a commission on all merchandise sold by them. In addition, there are 21 other dealers in the company's territory, and these are larger concerns carrying their own line of merchandise. The company has an arrangement with these dealers whereby it connects free of charge all appliances sold by them to its customers, except water heaters and house-heating equipment. In addition, these dealers are allowed a discount on merchandise that they may purchase from the company for resale, and special discounts are allowed to architects, builders and apartment house owners in the territory. In connection with the special sales campaigns, the company also maintains close contact and cooperates with all dealers in its territory. The company also has established a contact with 34 cooperating licensed plumbers in its territory who connect all water heaters sold and also help to sell automatic water heaters on a bonus basis, as previously mentioned.

In general, the company's sales organization, sales promotion plans, and cooperative arrangements with dealers in the territory have been carefully planned, in our opinion, and are well designed to stimulate sales effort. As previously mentioned, however, further improvement could probably be attained by centralizing the authority and responsibility for the sales promotion functions under strong and load-building minded local management in order to eliminate duplication of effort and bring about better coordination. In addition, the recent reduction in the sales force, even if it were to effect an immediate net reduction in sales promotion expenses, may not be a desirable step from the longer-term standpoint in view of the competition now being faced by the company. The present sales force is equivalent to about 3,900 meters per man in the Waukegan District, 2,150 meters in the Lake Forest District, 2,650 meters in the Highland Park District, 1,700 meters in the Winnetka District, and 2,500 meters per salesman in the Libertyville District, with an over-all company average of about 2,700 meters per salesman. In this connection, we would prefer to see a sales force equivalent to about 2,000 meters per man, or about 13 outside salesmen as a minimum. Furthermore, if the company were to engage in a vigorous load-building campaign, coupled with a rate reduction which will be discussed under a subsequent heading, a much larger sales force would be advisable, in our opinion. We are inclined to question the ability of the present sales force to adequately cover the territory. The recent reduction in the sales force, however, should in part be compensated by the fact that the retained salesmen have shown superior performance in the past and, in addition, the cooperative dealer arrangement now in effect affords additional coverage of the market. Because of the importance of the volume of merchandise sales to the net cost of sales promotion, as discussed in detail under a previous heading, there is a question in our minds as to how successful the recent reduction in the sales personnel will be towards reducing the cost of sales promotion. The basic salaries of the 7 salesmen laid off would amount to only $4,200 per year, and it seems to us that this direct saving is not worth-while when viewed from the standpoint of the necessity confronting the company to protect its load against competition and build up its net operating revenue over a period of years. In addition to the above direct salary payments of $4,200, the company, under an expanded merchandise sales program, would also probably incur some loss on the merchandise sold, but it is our feeling that such losses are fully warranted, particularly when viewed from the longer-term standpoint. Additional recommendations as to desired changes in the sales promotion program to be used in the future will be made under a subsequent heading of this report.

Competitive Rate Considerations. In order to meet competition, a rate differential in favor of gas service is of paramount importance. General experience indicates that gas rates should probably be from 15 to 20% cheaper than electric rates in order to hold the cooking and water-heating load against severe electric competition. The experience of many gas companies, however, shows that a rate differential alone has not been sufficient to forestall the loss of cooking and water-heating business to electric competition, particularly in cases where the merchandising efforts of the competing electric utility are more aggressive than those of a gas utility. Therefore, in addition to a proper rate structure, a gas company must pursue an aggressive promotional program if it is to offset the psychological trend toward electric service.

The North Shore Gas Company competes with Public Service Company of Northern Illinois in all of its operating area except in Winnetka, which is served by a municipally-owned electric distribution system. The rates of the two electric competitors, however, are the same. Both electric systems have an off-peak water-heating rate of 1¢ per kwhr. and a cooking rate of 2¢ per kwhr. The electric rates are uniform throughout the entire area. According to our computations, based on typical monthly consumptions and taking into account the relative efficiencies of electric and gas appliances, the monthly electric and gas bills for cooking, refrigeration and water-heating service under the existing rate schedules compare as follows:

	Computed Monthly Bills	
	Waukegan	Other Territory
Electric Service:		
Refrigeration	$1.30	$1.30
Cooking	2.93	2.93
Automatic Water Heating	3.92	3.92
Total	8.15	8.15
Gas Service - General Rate:		
Cooking	2.34	2.44
Non-Automatic Water Heating	4.50	4.69
Refrigeration	2.05	2.13
Total	8.89	9.26
Gas Service - Optional Water-Heating Rate:		
Cooking	2.74	2.84
Automatic Water Heating	3.67	3.81
Refrigeration	1.27	1.30
Total	7.68	7.95

It is estimated that about 80% of the total number of residential gas bills in 1939 were rendered at the general rate, and therefore the above comparisons between the cost of electric service and the corresponding gas costs obtained under the general rate is of particular significance. Our computations show that gas cooking billed at the general rate has a cost advantage of about 18 to 20% over the cost of electric cooking. On the other hand, for combined cooking, water-heating, and refrigeration service, electricity has a cost advantage of 8 to 13.4% over gas service billed at the general rate. Similarly, the cost of refrigeration under the general gas rate is from 58 to 64% higher than the corresponding electric service cost. Obviously the general rate is not advantageous to large domestic consumers, and it is essential that every effort be exerted to transfer as many of these as possible to the more promotional automatic water-heating rate in order to protect the load against competition.

The cost comparison under the optional combination water-heating rate is somewhat improved in favor of gas, but even this rate shows a cost advantage of only 2½ to 5-3/4% for combination cooking, water-heating and refrigeration service. This rate differential is not sufficient, in our opinion, to protect the load against aggressive electric competition, and the present gas rate is not sufficiently promotional in character so as to enable the sales force to build up the water-heating and refrigeration load to a high saturation point, in keeping with the income level of the territory served.

Furthermore, the water-heating rate must meet oil competition which has already resulted in the loss of a considerable volume of business, as previously noted. At the prevailing oil prices we estimate that oil water heating is at least 50% cheaper than gas, and in order to equalize the cost, the present average price of about 18¢ per therm charged for water-heating service would have to be reduced to about 8¢ per therm. Experience elsewhere shows, however, that a gas company with an aggressive sales organization does not have to reduce its rates to this level in order to meet oil competition, as the consumer apparently is willing to pay a higher price for the convenience of gas service, and consequently it appears to us that a gas rate in the neighborhood of 13¢ per therm is probably sufficiently low to protect the water-heating load against oil competition, provided, of course, that an aggressive load-building organization is maintained at the same time.

The gas used for house-heating purposes under the present rate schedules works out to an average price of about 8½¢ per therm. On the basis of prevailing prices for other fuels, and taking the relative efficiencies of utilization into account, the cost of heating a home by means of gas is about 30% higher than the corresponding cost when oil heat is used, about 35% higher than stoker-fired coal, and about 15 to 22% higher than the cost incurred by using a hand-fired soft coal or coke heating plant. On the other hand the corresponding figure in favor of anthracite is only about 6%.

In considering the competitive position of the house-heating gas rate in relation to the prices of other fuels, it is well to keep in mind that the class of people who are users or prospects for gas house-heating service place a convenience value on gas above straight coal costs. Data collected by means of an actual field survey some years ago with reference to the reactions of coal users to the convenience factor, indicate that the preponderance of prospective gas house-heating customers in considering a change from coal to gas, are willing to place a convenience value in the neighborhood of $50 per heating season on gas service above straight coal costs. Other factors in favor of gas house-heating to be taken into account are savings due to less frequent redecorating of walls, cleaning of rugs and draperies, and other similar expenses because of the cleanliness of gas house-heating service. The latter also has an advantage in the relative maintenance and replacement costs of the central house-heating plant, particularly in comparison with oil-burner installations. When all of the above factors are taken into account, it seems to us that no reduction should be made in the house-heating rates of the company under existing conditions. Furthermore, owing to the existing peak-load characteristics of the system, discussed on pages 25 - 27 of this report, whereby the installation of a considerable additional capacity would become necessary in the event of a substantial increase in house-heating load, it appears advisable to divert much of the present sales promotion efforts from house-heating to other types of loads, particularly water-heating and refrigeration, as will be discussed in more detail in a subsequent paragraph.

While it would be desirable to ultimately revise the general rate, this is inadvisable as an immediate step because it would result in a very large loss in revenue which cannot be regained by way of load-building activities. As previously mentioned, the gas utility system is now earning far less than a reasonable rate of return on the estimated depreciated original cost of the property. In addition, the general rate is designed for the small gas users, most of whom, as a rule, do not use a sufficient amount of gas so as to carry their proportionate share of the costs incurred by the company in furnishing the service.

As an initial step toward an objective rate program, we would recommend a more promotional combination cooking, water-heating and/or refrigeration rate, coupled with an aggressive load-building campaign. The step we have in mind is to eliminate the two existing water-heating rates (the General and Automatic Water Heating Rate and the Optional Combination Water Heating Rate) and to substitute the following rate schedule in their place:

First 400 cu. ft. or less consumed per month	- $1.00 (minimum)
Next 2000 " " consumed per month	- $1.27 per M.c.f.
All over 2400 cu. ft. consumed per month	- .70 " "

The above rate represents a reduction of 30% in the third step of the present optional water-heating rate (shown on Page 53 of this report) and likewise represents a reduction of 39% in the third step of the present general and automatic water-heating rate. The proposed rate is to apply uniformly throughout the entire territory served.

A consumer analysis, based on a breakdown of the billings by consumption blocks for the year 1939, indicates that the proposed rate will effect an annual reduction of about $24,000 to present users. This rate reduction, however, while not warranted from the standpoint of present rate of return, is extremely advisable, in our opinion, as a protective measure against competition, and is likewise highly desirable from the standpoint of giving the sales force a promotional type of rate in order to secure a larger share of the new load, as well as water-heating and refrigeration loads now being served by competitors. In addition, of course, the proposed rate should stimulate additional usage among the present customers served under the general rate as it offers a substantial inducement for converting their present tank heaters to automatic operation without a large increase in the monthly bill. As a matter of interest, we are giving below a tabulation showing the typical monthly bills computed for different types of use under the proposed rate:

	Computed Monthly Bills	
	Waukegan	Other Territory
Proposed Combination Gas Service Rate:		
Cooking	$2.74	$2.84
Water Heating	2.84	2.91
Refrigeration	1.24	1.30
Total	6.82	7.05

In comparison with electricity, the above rate has a cost advantage of about 16 to 18½% for cooking and water heating and a corresponding cost advantage of 13½ to 16½% for combined cooking, water-heating and refrigeration service. In addition, for water-heating service the proposed rate is much more competitive with oil than the rates now in effect. While the above rate differentials in favor of gas are not as high as would be desired, it is our feeling that the proposed rate, coupled with an aggressive sales promotion organization, should place the company in a much stronger competitive position, than now is the case.

As time goes on, however, additional rate adjustments will probably become necessary to the end of eliminating a number of the present rate schedules and combining them into, say, three permanent rate schedules, such as a general rate, a combination cooking, automatic water-heating and/or refrigeration rate and a combination space-heating rate, plus, of course, the present special industrial rate. In addition, the ultimate rate policy would have to be pointed toward a large users' rate even more promotional in character than that proposed above, particularly should there be a future reduction in the electric rates applicable to cooking and water-heating loads.

In that connection, it is well to keep in mind the possibility, in the not far distant future, of a reduction in the electric rates charged by Public Service Company of Northern Illinois, as under strict regulation that company appears to be vulnerable to a substantial rate cut, in our opinion. It is, of course, impossible to predict what form a new domestic electric rate structure would take, and while it is entirely conceivable that the cooking step might be reduced to, say, 1½¢ per kwhr. in place of the present 2¢ step, it would be more logical to expect a reduction in the top step of the electric rate. As this is now 6¢ per kwhr., it appears to be out of line with the corresponding step charged by other electric utility systems serving areas of somewhat similar type. A reduction in the first two steps of the electric rate schedule would not affect the competitive position of the gas rate with respect to cooking and water-heating loads, but would adversely affect its competitive position with respect to refrigeration load. It seems to us that another point to keep in mind in visualizing the future rate and load-building policy of the Gas Company is that the competition on the part of Public Service Company of Northern Illinois for the development of cooking and water-heating business has not been particularly aggressive, in our opinion. Recently, however, promotional activities along these lines have increased, and from time to time the electric company has been offering free installation and free wiring of electric ranges and water heaters, together with a liberal installment plan for time payments on electrical appliances sold to the consumers. The electric competitor is in a much stronger financial position to offer such inducements, as compared with the present position of the Gas Company, particularly in view of the impending maturity on the latter's bonds which come due on January 1, 1942. It is probable that the electric company's sales promotion efforts in the cooking and water-heating field might become more aggressive as time goes on, particularly if that company had to absorb a substantial rate cut.

The factors and probabilities discussed above further strengthen the necessity, in our opinion, for an immediate gas rate reduction along the lines previously suggested, and also point to the necessity of continuing a vigorous load-building program on the part of the Gas Company, even to the extent of increasing the present sales force, as previously suggested.

Present Market Saturation and Future Load-Building Possibilities. There is no accurate account available as to the number of major gas consuming appliances served by the company. However, on the basis of a survey made by the company in 1931, and taking into account the estimated number of subsequent new installations and removals or losses to competition, we estimate that the present domestic appliance saturation (i.e., the number of appliances in per cent of the number of residential customers) is approximately as follows:

	Per Cent Saturation
Ranges	97.0
Side-Arm Water Heaters	33.5
Automatic Water Heaters	18.0
Refrigerators	8.3
Active Central House Heating Installations	4.3

The above estimate indicates a relatively low saturation in water-heating load, particularly automatic water heaters, for this type of territory. In addition, a fairly substantial number of automatic water heaters are used by the customers on a non-automatic basis during the heating season, with such customers obtaining the bulk of their hot water requirements through the furnace coil. The meter readers make monthly checks on the equipment, and when they find the automatic pilot burner shut off, the customer is billed under the general rate instead of the automatic water-heating rate. Unfortunately, the present automatic water-heating rate schedules of the company do not require the removal of the furnace coil, whereas, the automatic water-heating rate schedules of other companies require that the furnace coil be removed before the customer becomes eligible for service under that form of rate. In the event that the company adopts the rate reduction suggested above, it would be advisable to include a provision in the proposed combination rate which would require the removal of the furnace coil as a condition of the applicability of the new rate. This matter, of course, would have to be handled tactfully by educating the customers through advertising and personal sales contact on the low cost of water-heating service under the new rate. At the same time, a concentrated effort should be made toward removing the furnace coils on existing automatic water-heating installations.

Considering the competitive position of the present house-heating rates in relationship to other fuels, the existing house-heating saturation of about 4.3% for the territory as a whole is higher than would ordinarily be expected, but the present saturation reflects the high income level of the territory served, whereby a number of consumers are willing to pay considerably more for gas house-heating service in comparison with the costs incurred for similar service when using other forms of fuel; apparently such customers place a high value on the convenience of gas house heating service. A further break-down of the figures shows that the company enjoys a house-heating saturation of about 14% in the Winnetka Distirct, 9½% in the Highland Park District, and 4% in the Lake Forest District. The saturation in the Waukegan and Libertyville Districts is quite low, amounting to less than 1%.

The company's territory, owing to its high income level, affords excellent prospects for a high house-heating saturation at a more competitive price for gas. However, the rate level required to achieve the high house-heating saturation in question would be economically feasible only in the event that natural gas is made available at a reasonable gate rate and the system is changed over to mixed gas operation along the lines previously discussed on Pages 28-29 of this report. If and when natural gas becomes available, a house-heating saturation of 15% for the system as a whole could easily be achieved, in our opinion. Meanwhile, the company would find it more economical to limit its house-heating promotion activities only to the new homes being built in the territory, at the same time, of course, taking on any old homes that apply for house-heating service through the efforts of the dealers in gas house-heating equipment. It should be noted that the promotion of house heating in new homes is highly desirable not from the standpoint of the profitableness of this class of business under existing conditions, but on account of the fact that it will assure to the company a much larger proportion of the more profitable cooking, water-heating and refrigeration load. The experience of another company which we have analyzed will illustrate this point: It was found that when gas heat is used in new homes, 92% of the cooking load, 98% of the water-heating load, and 40% of the refrigeration load also went to gas service. On the other hand, when oil heat is used, the gas company in question was able to obtain only 80% of the cooking load, 50% of the water-heating load, and 9% of the refrigeration load, and in the case of coal heat, only 82% of the cooking load, 50% of the water-heating load, and 5% of the refrigeration load went to gas service.

It appears to us that the curtailed house-heating sales promotion program suggested above would still enable the company to connect about 100 new central house-heating jobs per year. When natural gas becomes available, the prospects for gas house heating on a profitable basis in this particular territory are excellent, as previously noted. The best prospects for this development would be the present oil burner users, whose equipment is quite old and is approaching the replacement point. It is of interest to note in that connection that the oil burner saturation in the company's territory is now in excess of 18%, which is a comparatively high figure.

As previously mentioned, the most desirable sales promotion program for the company to follow during the next several years is concentration on automatic water-heating and refrigeration loads, and the above suggested rate reduction is an essential part of such a program. This would require an expansion in the sales promotion efforts involving an increase in the present sales force. In order to achieve best results, it will also become necessary, in our opinion, to revise the salesmen's commission and bonus so as to relate their compensation more closely to the amount of gas load added to the system and to the net revenue produced, rather than to the gross dollar merchandise sales. In this connection, it will probably be desirable to reduce the basic commission, but at the same time add a bonus based on the estimated number of therms that the appliance sold adds to the company's lines. In addition, we would suggest an extra bonus to salesmen on each appliance sold in excess of a predetermined monthly quota, and this would be particularly stimulating in connection with automatic water-heater and refrigerator sales.

As previously noted, the present water-heater saturation is low, particularly for a high income territory of this type which does not have many apartment dwellings. The combined tank and automatic water-heater saturation is equivalent only to 51½%. It is our feeling that with a promotional rate schedule, coupled with a more concentrated effort on this type of business, an ultimate saturation of 30% for tank water heaters and 40% for automatic water heaters (or a combined water-heating saturation of about 70%) would be more in line with the character of the territory. Furthermore, under mixed gas operation, provided an economical gate rate for natural gas becomes available, a much higher saturation could probably be achieved through a concomitant lower retail rate. As previously noted, we did not make a detailed study of the economics of natural gas as a part of the present analysis of the North Shore Gas system, but from a limited examination of the matter, it appears to us that the future earnings outlook of the property could conceivably be very substantially improved through conversion to mixed gas operation, depending, of course, on an economical gate rate for natural gas.

While the existing over-all automatic water-heating saturation of the company is low, at about 18%, a further analysis of the saturation by operating districts shows an automatic water-heater saturation of about 45% in the Winnetka District and 24% in the Highland Park District. The corresponding saturation in the Lake Forest District is surprisingly low, at about 15%, while the corresponding figures for the Waukegan and Libertyville Districts are only 3½% and 8% respectively. Waukegan, however, has a large number of tank heaters which make its combined water-heating saturation (i.e., tank heaters and automatic water heaters) about 54%, while the corresponding combined figures for the other districts are 57% for Winnetka, 43½% for Highland Park, 38½% for Libertyville, and 37½% for Lake Forest. It is estimated that there are probably about 1,500 oil water heaters (including Bell & Gossett attachments), and at least 3,500 coal-pot water heaters in the territory.

Probably the best field for increasing water-heating gas consumption is among the present non-automatic water heater users served under the general rate. Experience elsewhere shows that when a tank heater is converted to automatic operation, the customer's gas consumption increases about 13 therms per month, and under the proposed rate this would bring in an additional revenue of about $1.65 per customer per month and an increase in net operating revenue of at least $10 per customer per year. A large number of customers in this class could be changed to continuous hot water service without a large outlay in a new automatic water heater, as substantially the same result can be accomplished by converting their present tank heaters to automatic operation at a cost of about $30 to the customer. A good prospect list for a vigorous automatic water-heating sales campaign can be obtained from an analysis of the present monthly gas consumptions and bills of the various customers now served under the general rate. In addition, of course, the replacement of present oil and coal-pot water heaters is another promising avenue for increasing gas water heating load.

The present gas refrigerator saturation, while extremely satisfactory in relation to the conditions found on many other gas properties, can be increased still further, in our opinion, an ultimate saturation in excess of 15% appears to be a distinct probability. Gas companies, in general, have been handicapped by the fact that the initial outlay for a gas refrigerator on the part of the customer is considerably larger than for an electric refrigerator, and in competing for this class of business the gas companies have to sell the gas refrigerator principally on a quality basis, together with the advantages offered by silent operation and low maintenance costs. There is only one company manufacturing gas refrigerators in this country, and the more or less monopolistic position which it occupies has tended to keep the prices relatively high due to lack of competition on the part of other manufacturers. We understand, however, that the basic patents which this manufacturer now holds on the Electrolux gas refrigerator expire within the next few years, and chances are that this will open the gas refrigerator field to other manufacturers, with a possibility of ultimately lower prices. This, should it occur, would be extremely helpful to the gas industry in general and to North Shore Gas Company in particular. It appears to us, however, that even under existing conditions the rate revision suggested above, coupled with an aggressive sales promotion program, should enable the company to increase its gas refrigerator load considerably further in spite of the relatively satisfactory saturation now enjoyed. As previously noted, a large number of electric refrigerators now in service in the territory are rapidly approaching the replacement point, and this affords an opportunity to the Gas Company for taking on a share of this business. In addition, it is anticipated that the company should be able to sell gas refrigeration to about 20% of the new homes to be built in its territory during the next several years.

<u>Projected Earnings</u>. As a final step in the analysis covered by this chapter, we have investigated the earnings possibilities of the North Shore Gas system during the next several years. In connection with these estimates, we assumed that the company will place in effect the more promotional combination rate suggested above and take an immediate rate reduction of about $24,000 on an annual basis. It was further assumed that this rate revision would be coupled with an extended sales promotion program, as previously outlined. The estimates are also based on a continuation of the new homes building construction activity in the company's territory at a rate somewhat above that actually experienced during the past three-year period, and the estimates further assume normal

general business conditions. No allowance was made for any substantial general wage increases or for any other abnormal increases in the cost of doing business, but an ample allowance was made for increment operating costs in connection with attaching and serving the contemplated increase in gas load. With reference to the increment cost of the additional gas required to supply the load, we assumed that the properties would be merged, thereby eliminating the present gas contract between the Gas Company and the Coke Company, and it was further assumed that the additional gas production would have the benefit of average coke market conditions as a residual credit.

Our estimates cover the next three-year period. On the basis of the above assumptions, they indicate that the additional gas load that can reasonably be developed during such three-year period by the selective load-building program previously outlined, will not only absorb the aforementioned rate cut of $24,000, but would, in addition, increase the combined net operating income of the system, after taxes and depreciation, by about $70,000 above the 1939 actual results.

It should be noted, in this connection, that if the property were to enjoy a good coke market, such as that experienced in 1936 and 1937, the above earnings estimate could be materially exceeded. The effect of the coke market upon the earnings of the system has already been discussed in detail on Pages 62-66 of this report, and as shown therein, this factor exerts a very important influence on the net earnings of the system.

In considering the future earnings outlook of this system, another factor to keep in mind is the probability of further rate adjustments toward an objective rate structure, as previously outlined, particularly should there be a future reduction in the electric rates applicable to cooking and water-heating loads. Such further rate revisions, however, as may be needed from time to time should place the company in a better competitive position and should be absorbed by additional load building due to the anticipated future growth in the territory served.

The above estimates are based on the present manufactured gas operation. Under mixed gas operation, it appears that the future earnings outlook of the property ~~could~~ conceivably be improved substantially, as previously mentioned, depending of course, on an economical gate rate for natural gas.

CONSTRUCTION REQUIREMENTS

The Coke Company's construction requirements are expected to be very small and will probably average to about $10,000 per year during the next five-year period. Such construction expenditures will involve mainly the replacement of minor pieces of equipment at the coke oven plant. The major items of property at the coke oven plant still have a relatively long unexpired life and no major replacements will be needed for many years to come.

The Gas Company's construction budget for the year 1940 contemplates a gross construction expenditure of about $156,000. Among the larger construction items involved are an additional compressor unit at the North Plant together with the reconditioning of one of the present compressors, and these two items will require an expenditure of about $72,000. The budget also includes a $10,000 item for a butane gas installation at the North Plant, as previously mentioned on Page 28 of this report. The balance of the expenditures is accounted for by the installation of additional district governors and new distribution mains, services and meters, and by small replacements of existing mains. The normal construction requirements during the next five-year period, as far as they can be forecast at the present time, are estimated to amount to about $100,000 per year. In 1942 or 1943, however, the company would probably have to be confronted with the installation of additional water gas plant capacity, which would involve a capital expenditure of about $200,000. By that time, however, it is conceivable that this expenditure might be avoided by converting a portion of or the entire system to mixed gas operation should natural gas become available at a reasonable gate rate or an arrangement is made to purchase mixed gas for the southern portion of the system from Peoples Gas Light & Coke Company, as previously discussed on Pages 28-29 of this report.

On a combined basis the normal construction requirements of the two properties, except for the aforementioned $200,000 expenditure for additional production facilities, would thus average about $120,000 annually for the next five years, whereas the combined depreciation cash would amount to more than $180,000 per year, including a step-up of about $9,000 in the annual depreciation taken on the coke oven plant, as previously recommended. It appears, therefore, that the capital expenditures of the system would be amply covered by the available depreciation cash, and in addition, a part of the depreciation provision can be used for the retirement of debt, as will be discussed in more detail in a subsequent chapter of this report. The above comments are predicated on the assumption that the two companies will be merged into a single corporate entity.

MANAGEMENT AND PUBLIC RELATIONS

The management of the properties is headed by Mr. William A. Baehr, president and director of both companies. Mr. Baehr is also president of the parent company, as well as of the William A. Baehr Organization, Inc., and, in general, he is the dominating figure in the entire North Continent Utilities Corporation system. He is about 67 years old and has had long experience in the utility field. His first position in the utility business was with Milwaukee Gas

Light Company after his graduation as an engineer from the University of Wisconsin. He subsequently went with the Denver Gas & Electric Company as superintendent of gas distribution, and later served as chief engineer of Laclede Gas Light Company. In 1908 he severed his connection with that company and went into consulting engineering practice in Chicago. In 1915 he became president of North American Light & Power Company, with which system he was affiliated as part owner and as president until 1926. As previously stated, his first connection with the North Shore Gas properties dates back to May, 1917, and in 1922 he was the principal organizer of North Continent Utilities Corporation, over which he still exercises effective control.

Other officers of the North Shore Gas properties are Mr. A. C. Winters, vice president and treasurer and Mr. William B. Baehr, vice president and secretary. These gentlemen occupy similar positions with the William A. Baehr Organization, Inc., and with North Continent Utilities Corporation. In addition, the Coke Company has another vice president, Mr. J. W. Sykes, who is in charge of operations of the Coke Company and who is likewise a member of the Baehr Organization in charge of construction and engineering for the various subsidiaries of North Continent Utilities Corporation.

Mr. Winters is an accountant by profession and his experience in the public utility field dates back to 1908, in the employ of Peoples Gas Light & Coke Company. He remained with that company until August, 1915, and then he became associated with Mr. William A. Baehr and served in the capacity of assistant treasurer of the North American Light & Power Company until 1923. Subsequently he became an officer of North Continent Utilities Corporation and of its various subsidiaries, including the North Shore Gas properties, in which capacity he is serving at the present time, as noted above. Mr. Winters is about 51 years old.

Mr. William B. Baehr, who is about 37 years old, is the son of Mr. William A. Baehr. He is a graduate chemical engineer and upon completion of his engineering course, he also attended the business school of Harvard University for two years. He entered the business field, associating with his father, in about 1927. His entire business experience has been with the Baehr Organization and the various subsidiaries of North Continent Utilities Corporation.

Mr. Sykes, who is about 57 years old, has been connected with engineering and construction work most of his business career and his experience in the utility business covers a period of about 30 years, first with the Laclede Gas Light Company and then with the North American Light & Power Company properties, where he was chief construction engineer during the time when Mr. Baehr was in control. Since 1926 Mr. Sykes has been the chief engineer of the Baehr Organization in charge of construction and operation.

Other key members in the Baehr Organization are Mr. A. W. Childs, Mr. E. R. Foster, and Mr. H. S. Oyen. Mr. Childs, who is about 57 years old, acts as chief accountant and is also assistant treasurer of North Continent Utilities Corporation and its various subsidiaries, including North Shore Gas Company. Mr. Childs has been connected with the William A. Baehr Organization for over 20 years and prior to that time he was employed by United Light & Power Company and Central Illinois Public Service Company. Mr. Foster is about 46 years old and he has been associated with the Baehr Organization for over 25 years. When Mr. Baehr was in control of the North American Light & Power Company, Mr. Foster acted as rate and consulting engineer for those properties from 1915 until 1923. In his present functions he takes care of the rates and valuation work for the North Continent Utilities Corporation subsidiaries. Mr. Oyen's functions and business experience, have already been discussed on Pages 90-91 of this report.

In general, the various members of the Baehr Organization staff have had long experience in the public utility field and, as will be noted from the above discussion, they have been associated with Mr. Baehr for many years. The Baehr Organization maintains headquarters in Chicago and has a staff of about 25 people. Prior to 1928 it was individually owned by Mr. Baehr, but in 1928 it was incorporated in Delaware. We understand that in December, 1938, this organization was approved by the Securities and Exchange Commission as a service company, and in that connection it divested itself of all outside investments except working capital and furniture and fixtures, and its capital stock was reduced from $100,000 to $20,000. All of the capital stock is owned by North Continent Utilities Corporation.

Both the North Shore Gas Company and North Shore Chemical Company have service contracts with the William A. Baehr Organization, Inc. The Baehr Organization also services all of the other subsidiaries of North Continent Utilities Corporation, as well as the parent company itself, under similar contracts. The services called for under the contracts are typical of the usual supervision and management services performed by service organizations of this type and are subject to the board of directors of each company. Charges for service are made at cost on a time ticketing basis insofar as possible. The balance of the expenses of the Baehr Organization, including a 5% return on its invested capital, are divided between North Continent Utilities Corporation and its subsidiaries - 25% and 75% respectively. The 75% component is divided among the subsidiaries in proportion to their gross operating revenues. The service contract is on an annual basis. The Baehr Organization charges have already been discussed on Pages 74 - 75 of this report.

The local operating staff of the North Shore Gas Company is headed by Mr. J. G. Hart, manager. Mr. Hart came to the property as manager in May, 1917, and prior to that time he was connected with

Public Service Company of Northern Illinois, where, we understand, he was employed as supervisor of gas plant operations. Mr. Hart is an engineer by profession and his experience covers mostly the operating end of the business rather than load-building and financial matters. He is about 60 years old. We understand that he was taken ill about three years ago, and it appears that his health has not completely recovered. Mr. Hart is well liked by the people in the territory served, particularly in the Waukegan area, and is probably valuable to the property from the standpoint of public relations. It seems to us, however, that he is not the aggressive type of an executive of the caliber required for a property of this kind. The condition of his health is probably a factor in that connection, although the limited authority which appears to be afforded under the present set-up, might be another contributing element. Mr. Hart is assisted by Mr. E. H. Wachs, who serves in the capacity of assistant manager and also is superintendent of the Winnetka District. Mr. Wachs is a much younger man, being about 37 years old, and has been serving in his present capacity since March, 1935. Prior to that time he was manager of the Great Northern Gas Company, Ltd., at Sault Ste. Marie, Ontario, Canada, which is a small subsidiary of North Continent Utilities Corporation serving about 1,000 customers. He served as manager of that property for about three years, and prior to that time he was employed as industrial sales engineer by the North Shore Gas Company, and also was employed in the Chicago office of the Baehr Organization. Between 1927 and 1930 he was employed as an engineer at the coke oven plant. Mr. Wachs is more aggressive than Mr. Hart and presents an impressive appearance. However, there is some question in our minds as to whether he has as yet sufficient experience and ability to command the full loyalty and cooperation of the employees if he were to be placed in charge of the properties in the event that Mr. Hart were to retire from active service.

Under the present set-up the management policy is prescribed by Mr. William A. Baehr through the Baehr Organization, and in that connection it appears to us that Mr. Baehr is the dominating figure in the picture. While the management fees collected by the Baehr Organization, when taken together with the relatively low salaries paid to the local operating officials of the gas properties, result in a reasonable over-all management expense, we are of the opinion that the present local management is rather weak. A connection with a supervisory service organization of this type, for such special services as are needed, is desirable in an advisory capacity, but, in our opinion, strong local management well adapted to load building and public relations is of vast importance. The combined North Shore Gas properties, particularly under a consolidated operation, are of sufficient size to warrant a local executive of high caliber with sufficient authority and responsibility to insure proper coordination of the various activities and to instill enthusiasm in the local personnel to the end of improving public relations and building up the use of gas service still further.

Financial policies which have been followed for a number of years have not, in our opinion, been realistic. The refunding operation in 1937, involving the present 5-year Joint Mortgage Bonds, was only a temporary solution to the problem and the management apparently was unwilling to face the long-term actualities of the situation at that time. While the bond maturity of the Gas Company was met and interest charges reduced, it is of interest to observe that the maturity of the Coke Company's senior debt was actually shortened through this refunding operation. At the time of this refunding, it appears to us that the management should have taken the opportunity afforded by the then existing reasonably favorable market conditions to finance the capital structure of the properties on a permanent basis.

Irrespective of the merits of the investment of the Coke Company in North Continent Mines, Inc., and S. W. Shattuck Chemical Company, the fact remains that at the time when this investment was made, the affiliated gas company, in whose solvency the Coke Company is very vitally interested on account of the gas sales contract, was faced with an early maturity of its debt, and sound financial policy would have dictated that the Coke Company maintain its funds for the assistance of its principal customer. Furthermore, the temporary nature of the 1937 refunding operation would seem to require the Coke Company to give very serious consideration toward liquidating these outside investments as a step toward meeting the 1942 maturity problem. While the time may not be opportune for such liquidation, we know of no efforts made in that direction. In addition, the continuation of dividends on the preferred stock of the Coke Company, in the face of a continued downward trend in combined earnings, appears to us to have been injudicious in the face of this maturity. While the contractual obligation to retire debt has been exceeded during the life of these short-term bonds, it would seem that a more realistic financial policy would have required the conservation of all earnings as a preparatory step toward meeting the 1942 financial problem.

It also appears that these problems imposed on the properties by the pending short maturity have handicapped their load-building efforts and have prevented a more realistic rate policy with which to meet the inroads made by competition against the gas load. It seems that during the recent past the management has been trying to conserve cash as much as possible and to eliminate or postpone essential operating expenditures required by an aggressive load-building program in order to show as large a net income for the property as possible preparatory to refunding the bonds before they come due on January 1, 1942. While there may be considerable justification for the management's program under the existing circumstances, we are of the opinion that this policy, when viewed from the longer-term standpoint, will not serve the best interests of the security-holders and the consumers. The situation requires a realistic approach under which the present Joint First Mortgage 4% Bonds will be permanently refunded before maturity and under which the present debt structure will be improved.

Inquiries which we made indicate that the Gas Company's public relations are not entirely satisfactory. It appears that the company has not been successful in building up the good will of its customers and considerable dissatisfaction now exists in the territory. A contributing factor to this situation is the feeling on the part of consumers that gas rates are high, and this is accentuated by the lower and more promotional rates now in effect by the other gas companies serving adjoining territory in the Chicago metropolitan area. Many of the customers are employed in Chicago or have occasion to move from the territory of one company to another, from time to time; this places them in a position to make a comparison of their gas bills, and consequently the existing rate differentials can conceivably have a detrimental effect on public relations. Another contributing factor is probably traceable to the preferred stock customer-ownership campaigns whereby, as we are advised, a majority of the preferred stock is still held in the territory served. The stock has depreciated very materially in market price, and in addition, the owners have not received a return on their investment for many years.

Another important reason for such unsatisfactory public relations as now exist is the rather stringent customer's deposit policy which the company now has in effect. Under this policy a number of customers with established credit are required to make a deposit with the company in order to guarantee their gas service account, whereas the same customers do not have to make a similar deposit when they apply for electric service, as apparently the electric company follows a more liberal policy in that connection. Another factor that needs correction is a better coordination in the procedure for taking care of customers' inquiries and complaints more promptly. It should be noted that the type of customers served in a rich territory of this kind require very skillful treatment and prompt attention in all of their contacts with the Gas Company, in order to assure proper public relations.

It is our feeling, however, that with strong local management and with a more progressive rate policy and coordination of operating activities along the lines previously suggested, it should not be difficult to place the company's public relations in excellent shape over a period of time, provided, of course, a concentrated effort is made in that direction.

PRESENT CAPITAL STRUCTURE

Gas Company

The present capitalization of the North Shore Gas Company as of March 31, 1940 was as follows:

Funded Debt:	
Joint First Mortgage, 4% Bonds, Series A, due January 1, 1942	$4,876,000 (a)
Capital Stocks:	
Preferred Stock $100 Par Value:	
7% Cumulative	2,795,600 (b)
6% Cumulative	None
Common Stock, $25 Par Value per share	3,000,000

(a) Including $218,000 held in the company's treasury. As of June 30, 1940, an additional $10,000 was held in the company's treasury reducing the outstanding bonds to $4,648,000 at that date.
(b) Dividends aggregating $1,230,064($44 per share) were in arrears at March 31, 1940.

The Joint First Mortgage 4% Bonds issued under an indenture between North Shore Gas Company and North Shore Coke & Chemical Company and City National Bank & Trust Company of Chicago, trustee, are the joint and several obligations of the two companies secured by a first lien upon the real estate, plants, distributing systems and equipment owned by the respective companies. Under Section 2, Article IV, of the indenture, the companies covenant to pay to the trustee semi-annually a "debt service fund" of $138,000 to be applied by the trustee first to the payment of interest, and the remainder to the purchase or redemption of bonds. Of the foregoing debt serviee fund, $97,520 will be required for interest on the July 1, 1940 coupon (including $218,000 principal amount of bonds in the North Shore Gas Company's treasury). Thus, on that date a balance of $40,480 will be available for the retirement of bonds. The companies may satisfy this retirement provision by surrendering bonds at par. Up to March 31, 1940, a total of $224,000 principal amount of bonds had been retired through the debt service fund.

The terms of the indenture securing the present Joint First Mortgage 4% bonds are not of any particular significance in the present study, and they will not be discussed except to note that the bonds are currently redeemable at a premium of 1/2 of 1%.

The preferred stock has equal voting power per share with the common stock, or 27,956 votes to 120,000 votes, or approximately 23% of the total votes. Dividends on this stock are payable quarterly, January 1, etc., and regular dividends were paid to and including October 1, 1933.

During the first three quarters of 1934, 50 cents a quarter was paid and no dividends have been paid subsequently. The original issue of this stock was 30,000 shares, which was sold by the company in the territory served largely on installments, under a customer-ownership program. Sales were initiated in 1923, and a market maintained by the company until about 1932. At the close of these operations, the company had repurchases of 2,044 shares which were subsequently retired, and it is estimated that a large majority of the outstanding stock is currently held in the territory served. The total number of preferred stockholders at April 5, 1940, was 2,421, being an average holding of 11 shares.

North Continent Utilities Corporation owns all of the outstanding common stock, and 637 shares of the preferred stock.

Coke Company

The present capitalization of North Shore Coke & Chemical Company as of March 31, 1940 was as follows:

Funded Debt:	
5-year 4% Debentures due January 1, 1942	$1,625,000
Capital Stocks:	
7% Cumulative Preferred Stock $100 Par Value per share	1,500,000
Common Stock $1.00 Par Value per share	200,000

The outstanding 5-year 4% Debentures are all owned by North Shore Gas Company, and pursuant to the financial agreement dated January 1, 1937, between the two companies, the amount of outstanding debentures is equal to one-third of the amount of outstanding Joint First Mortgage Bonds. As a practical matter, however, this relationship is kept at the nearest $1,000. One-third of $4,876,000 is $1,625,333.33. The actual amount of outstanding debentures is $1,625,000. The amount of outstanding debentures is equal to one-third, with the above qualification, of the gross amount of outstanding bonds and the Coke Company has no interest in the $218,000 of Joint First Mortgage Bonds in the treasury of the Gas Company except a contingent interest of one-third in the profit, totaling $27,760, or $9,253.33 when and as the Coke Company retires debentures in the amount equal to one-third of the $218,000 Joint First Mortgage Bonds.

These debentures being identical as to maturity, rate of interest, prepayment provisions and debt service fund, are an arrangement designed to offset one-third of the Joint First Mortgage Bonds.

The properties of North Shore Coke & Chemical Company are, however, all under the joint first mortgage. $75,000 principal amount of the debentures has been retired through the debt service fund.

The 7% Cumulative Preferred Stock has equal voting power per share with the common stock representing 15,000 votes to 200,000 votes, or approximately 7%. The stock paid regular quarterly dividends January 1, etc., to April 1, 1932, inclusive. None were paid thereafter to April 29, 1935, when $7 was paid. In 1936, $8.75 was paid. In 1937, as a part of the financial program in connection with the issuance of the Joint First Mortgage Bonds, $22.75 per share was paid, cleaning up all arrearages. Subsequently, dividends have been paid at the rate of $5.00 per year and the stock was in arrears at March 31, 1940 in the amount of $85,250, or $5.75 per share.

North Continent Utilities Corporation owns 13,696 out of the 15,000 shares of preferred stock, and 198,150 out of the 200,000 shares of common stock. At April 17, 1940, there were reported to be 40 holders of preferred stock and 13 holders of common.

The 12,500 shares of Coke Company preferred stock and 120,000 shares of Gas Company common stock are pledged under the First Lien Collateral and Refunding 5½% Series A Bonds of North Continent Utilities Corporation. The balance of that company's holdings in the two situations are not pledged.

PROPOSED FINANCIAL PROGRAM

The companies are faced with two major financial problems: The maturity on January 1, 1942, of the $4,658,000 outstanding Joint First Mortgage 4% Bonds, and accumulating dividends on the 27,956 shares of $100 par 7% preferred stock of the Gas Company and 15,000 shares of $100 par 7% preferred stock of the Coke Company.

As the first step in meeting these two problems, we concur in the recommendation that the two properties be merged into a single company under a single capital structure. There are numerous reasons for such a merger, the more important of which are summarized as follows:

The actual operations of the properties are interdependent. One is dependent on the other as a source of supply. One company is dependent on the other as a market for one of its primary products. Neither company, from a practical standpoint, can operate without the other. Broadly speaking, the two companies represent a single business enterprise.

Under the present set-up, full advantage has not been taken of this single nature of the business. For example, of necessity the choice between water gas and coke oven gas, from the standpoint of the Gas Company, has been a matter of contract price rather than actual cost of production. It has been advantageous to the Gas Company to use water gas because of the contract price of coke oven gas in a number of instances when, viewing the situation as a combined operation, coke oven gas actually was cheaper. Such a situation results in an economic loss. It must be pointed out that continuation of such a situation would result in a modification of the contract price and no serious losses of such nature have been permitted. However, operation as a single enterprise, unconfined by contractual relationships and diversity of equities will, in our opinion, place the companies on a more efficient basis.

The two companies are financially interdependent, beyond their operating relationship of source of supply and market. They are tied together by means of a purchase and sale contract that extends over a long term of years. This contract has proved unsatisfactory in the past as is witnessed by its numerous modifications during the first few years of its existence. It seems fair to assume that further modifications will be required in the future to meet changing conditions. The continuation of a workable contractual relationship between the companies is to the interest of each, each being dependent on the other's ability to perform.

A further financial tie between the two companies is the Joint First Mortgage. This being a several as well as joint obligation, it is beyond the means of either, without substantial fulfillment of the other on its share of the obligation.

As a consequence of the purchase and sale contract and the Joint First Mortgage, each company is as concerned with the solvency of the other as it is with its own. Therefore, each is subject to a risk largely beyond the control of the Board of Directors of the particular company. Perhaps the success of this involved situation in the past is largely due to the ~~fact~~ that both companies are controlled by the same interests, operated by a single management, and considered from an operating viewpoint largely as a single business enterprise. However, to equitably operate the two corporations to the satisfaction of all interests is occasion for a number of problems. For example, in spite of its ample working capital position and its earned surplus, the payment of dividends on the preferred stock of the Coke Company is a concern of the Gas Company in view of the pending maturity of the Joint First Mortgage. However, dividend action of the Coke Company is a matter over which the Gas Company technically has no control.

In addition to the complex financial relationship, the existence of the two corporations has resulted in a complex capital structure. At the present time there are a total of six different issues of securities. A number of these issues can be eliminated by merger. Simplfication is desirable in itself and, in addition, should reduce expenses. Of greater importance, however, simplification should lead to better understanding and interest on the part of the investing public. Such interest should eventually lead to a saving in the price of capital to the business. A Joint First Mortgage Bond is an unusual security and generally not well understood. As a consequence, the market tends to be limited. We are of the opinion that an orthodox first mortgage bond of a single company will command a broader market than a joint first mortgage of two separate corporate entities, regardless of how skillfully the latter may be drawn. The other securities of a single successor corporation should command a broader market than the various securities of the separate corporations.

As public utility companies go, neither company can be considered large. Size is an important factor in the cost of capital to a utility. Generally speaking, large utilities command cheaper credit than small. The merged company will be twice the size of the average of the two. This, ultimately, should result in decreasing the cost of capital to the business as a whole.

The reduction of the number of security issues reduces the number of interests involved, as expressed by these securities, thus simplifying corporate management. Each interest requires separate consideration in the conduct of the affairs of the business, thus complicating the solution of any problem. The example of the Coke Company dividend given above is an instance of a variety of interest due to different issues of securities as well as the problem consequent upon two corporations.

The evidence indicates an improvement in earning power through the merger of the two companies. There will be some saving in expense through the elimination of duplication necessitated by two corporations. There will be some savings in taxes. While these savings are not large, over the years they will amount to a considerable sum of money. There should be some savings in actual operations. The instance described above, the choice of coke oven and water gas, is an example.

The combined earnings, for the past ten years, have been more stable than the individual earnings of either company. This perhaps is partially the result of coincidence. During 1932, when the Coke Company's earnings hit an all-time low, the Gas Company's earnings were only slightly depressed. On the other hand, in 1937 when the Gas Company's earnings reached their low point, the Coke Company experienced its best year for the period. In 1934, improvement in the

Coke Company partially compensated for a slump in the Gas Company and the reverse was true in 1935. While this experience does not prove that the gas business and the coke business may not at some time have a simultaneous slump in earnings, there has been an advantage in this diversity of sources of profits. This past experience indicates more stable earnings for the merged company. In this connection, reference is made to the table of comparative operating income for the past ten years given on page 51 of this report. Expressed in terms of an index number using 1930 as a base of 100%, the range of net operating income on a combined basis between its low and high point, was 46.4%, while the corresponding variation for the Gas Company was 66.6%, and for the Coke Company 69.2%.

A merger should be advantageous from the standpoint of working capital. The combined present working capital is beyond the requirements of the normal operations of the businesses. Maintenance of excessive working capital costs money in capital charges. We recommend that the excess working capital be used to reduce outstanding debt. While this is recommended whether the two companies are merged or not, a single company will not require as much working capital as the total requirements of the two. While this difference is not large, the single operation can use more effectively the total working capital than can the two corporations which must keep these funds segregated.

There are other advantages such as simplification of executive control and increased efficiency in the use of personnel. None of these alone is of large consequence, but add to the advantages of a merger.

Another advantage of a merger is the elimination of any question as to the Illinois Commerce Commission jurisdiction over the Coke Company property. This would be of assistance in any question as to fairness of rates and should be beneficial to public relations.

Another reason, not necessarily of immediate monetary importance but nevertheless significant from the standpoint of policy, is control of supply. The obligation of a utility to its customers is of such primary importance that many utilities make it a policy to control the source of supply, even though such ownership actually costs more money. While there are many instances of successful utilities operating under arrangements comparable to the present situation, conservative public utility practice is to control the source of supply. The obligation to render service and the risks of such obligation in this instance fall upon the Gas Company. While experience under the present relationship from the standpoint of rendering service has been entirely satisfactory, the element of control does not exist. A merger would eliminate this situation which is a weakness from the standpoint of the investor.

We have been advised that the underwriters propose that the merged company refund the outstanding joint mortgage bonds by a new issue of 20-year First Mortgage 4% Bonds, and a new issue of 1 to 10-year Serial General Mortgage Bonds and the use of surplus working capital. This refunding has been suggested upon the following basis:

Outstanding Joint First Mortgage Bonds less $218,000 in Gas Company treasury at March 31, 1940		$4,658,000
Issue:		
New First Mortgage 4's	$3,400,000	
New General Mtge. Serial (avg.4's)	900,000	4,300,000
Balance to come from working capital		$ 358,000

The combined working capital of the companies at March 31, 1940, amounted to $928,801. The above balance of $358,000 to come from working capital assumes that the merged company receive par for the new securities. There will, of course, be other expenses including the present call premium of 1/2 of 1%, or $23,290. However, if, as a result of the proposed financing the merged company is left with $500,000 working capital, this should be sufficient because, as pointed out above, the merger and permanent financing of these properties makes the present working capital excessive.

The $3,400,000 new first mortgage debt would be equivalent to 45.64% of the estimated depreciated original cost of tangible properties of the two companies, as shown on Page 38 herein. The combined new first mortgage and general mortgage debt of $4,300,000, is equivalent to 57.2% of the above cost.

The pro forma income account of the Consolidated Company for the 12 months ended March 31, 1940, and for the past five calendar years is given on Page 118. This income account has been adjusted to eliminate intercompany transactions, to reduce the Baehr Organization charges to cost, to increase depreciation for the years 1935 and 1936, $18,300 and $9,000 for other years, to give effect to the interest charges on the proposed debt, and federal income taxes are shown at the rates in effect for the respective years. The following table, based upon this adjusted pro forma income account, shows various ratios of gross income to the above proposed debt structure:

	12 Mos. Ended 3-31-40	1939	1938	1937	1936	1935
Times First Mtge.Int. Earned	2.59	2.61	2.68	3.64	3.85	2.87
Times First Mtge. and Gen.Mtge.Int.Earned	2.05	2.07	2.12	2.88	3.05	2.29
Gross Income in % of First Mtge. Debt	10.37	10.46	10.74	14.58	15.42	11.57
Gross Income in % of Total Mtge. Debt	8.20	8.27	8.49	11.53	12.19	9.15

NORTH SHORE GAS COMPANY
and
NORTH SHORE COKE & CHEMICAL COMPANY
Pro Forma Income Account
(after eliminating transactions between the companies)
for the Calendar Years 1935 to 1939 inclusive
and for the 12 months ended March 31,1940

	12 Months Ended 3/31/40	1939	1938	1937	1936	1935
Operating revenues:						
Gas sales	$1,477,382	$1,437,292	$1,405,579	$1,369,891	$1,353,429	$1,319,411
Other gas revenues	23,399	23,135	24,755	18,562	18,594	19,859
Coke sales	552,515	503,045	596,979	903,416	835,773	612,196
	$2,053,296	1,963,472	2,027,313	2,291,869	2,207,796	1,951,466
Operating revenue deductions:						
Cost of coke and gas sales	$ 865,078	772,509	809,423	933,359	933,055	870,128
Selling expense - coke	79,007	70,907	71,805	94,335	92,667	71,125
Management expense	40,565	39,646	72,361	56,555	42,039	46,359
Other operating expenses	377,877	385,730	372,506	360,911	283,950	284,220
Taxes - other than federal income	138,476	137,917	128,174	127,512	129,555	114,027
Taxes - federal income	42,384	43,082	45,275	57,150	62,181	35,308
	1,543,387	1,449,791	1,499,544	1,629,822	1,543,447	1,421,167
Operating inc. before provision for depreciation	$ 509,909	513,681	527,769	662,047	664,349	530,299
Provision for depreciation	181,681	181,287	180,017	178,909	174,963	174,459
Operating income	$ 328,228	332,394	347,752	483,138	489,386	355,840
Other income	24,461	23,270	17,263	12,711	34,973	37,638
Gross income	$ 352,689	355,664	365,015	495,849	524,359	393,478
Int. on proposed indebtedness	172,000	172,000	172,000	172,000	172,000	172,000
Net income	$ 180,689	183,664	193,015	323,849	352,359	221,478

Above statement gives effect to following:
(1) Baehr Organization, Inc. charges - based on service at cost.
(2) Depreciation - increased 1935 and 1936 $18,300; other years $9,000.
(3) Provision for federal income tax based on taxable income per statement at rates in effect for respective years.

As pointed out elsewhere herein, the low point for earnings of the last ten years did not coincide for the two companies. In terms of actual operating income, 1937 was the poorest year for the Gas Company and 1932 the poorest year for the Coke Company. The following is a statement based upon the results of each company during these two years, which is presented as a matter of interest. In this statement the actual income accounts have been adjusted to give effect to the Baehr Organization charges at cost, depreciation of the Coke Company has been increased by $18,300, federal income taxes have been adjusted to the 1939 rate of 19% on taxable income, intercompany transactions have been eliminated, and the resulting combined gross income has been compared with the interest requirements on the two proposed mortgages. The results are as follows:

	Gas Co. Year 1937	Coke Co. Year 1932	Combined
Operating Revenues:			
Gas Sales	$1,369,890	$477,291	
Other Gas Revenues	18,562		
Coke Sales		414,886	
	$1,388,452	$892,177	
Operating Revenue Deductions:			
Baehr Organization Charges	25,674	14,074	
Other Operating Expenses	1,031,709	676,304	
Taxes - Other than Fed. Inc.	100,059	30,250	
	$1,157,442	$720,628	
Operating Income before Provision for Depreciation	$ 231,010	$171,549	
Provision for Depreciation	109,908	66,300	
Operating Income	$ 121,102	$105,249	
Other Income	3,432	16,320	
Gross Income before Fed.Taxes	$ 124,534	$121,569	$246,103
Federal Income Taxes @ 19%			14,080
Gross Income after Federal Taxes			$232,023
Annual Interest on $3,400,000 First Mortgage 4's			136,000
Balance			$ 96,023
Annual Interest on $900,000 Gen. Mtge. 4's			36,000
Net Income Before Dividends			$ 60,023

The above combined gross income after federal income taxes is equal to 6.82% on the $3,400,000 first mortgage debt and 5.4% on the $4,300,000 combined mortgage debt. The combined gross income after federal taxes is equal to 1.71 times the first mortgage interest requirements and 1.35 times the combined first mortgage and general mortgage interest requirements. Even this combination of the non-coincident worst years of each company indicates sufficient earning power to cover proposed interest charges by a reasonable margin.

The annual interest requirements on the $4,658,000 Joint First Mortgage Bonds now outstanding are $186,320. The annual interest requirements on the proposed two issues are $172,000. The saving in interest amounts to $14,320, or a reduction of 7.7% in interest charges.

We understand that under the proposed refunding plan the general mortgage bonds are to mature serially over a period of 10 years, $90,000 to mature each year. We further understand that the new first mortgage is to contain no sinking fund until after the retirement of the general mortgage, but that after the general mortgage has been retired the first mortgage is to have the benefit of a sinking fund in the amount of $90,000 a year thereafter. Proposed debt retirement over the twenty-year term is equivalent to 41.9% of the original amount of the two issues. We have not been informed as to other provisions to be contained in the new indentures, but we presume that such provisions will be so drawn as to afford proper protection to the bondholders.

In considering the proposed financial plan, there are, in our opinion, several factors which should be taken into consideration. The proposed financial plan will solve the problem which is being faced by the companies in question of meeting the maturity on January 1, 1942 of the now outstanding Joint First Mortgage 4% Bonds. The proposed plan initially will result in a reduction in mortgage debt from $4,658,000 to $4,300,000, and will result in a reduction in first mortgage debt from $4,658,000 to $3,400,000. The proposed plan also calls for the elimination of general mortgage debt within a ten-year period and for a substantial reduction in first mortgage debt over a period of years.

Interest and debt retirement under the proposed plan will require $262,000 the first year, which compares with the annual debt service fund on the present joint first mortgage of $276,000, being a reduction of $14,000. As discussed on Page 105, the average normal construction requirements of the two properties are expected to be about $120,000 annually for the next five years, whereas the combined depreciation cash, including a step-up in the annual depreciation taken on the coke plant, would amount to about $180,000 per year. These figures indicate approximately $60,000 available from depreciation cash to take care of debt retirement as compared with the contemplated program of $90,000 per year. However, it must be borne in mind that in 1942 or 1943 the company may be confronted with a capital expenditure of $200,000 for additional gas plant capacity, in addition to the normal annual construction requirements of about $120,000 net.

As mentioned above, normal construction requirements of the two properties will amount to approximately $60,000 per year, on an average, less than proposed depreciation appropriations, thus permitting the proposed merged company, under normal conditions, to use a substantial portion of depreciation cash for debt reduction. Based on normal construction requirements, the available cash income of the company, available for debt service, would have covered the debt service requirements based on the proposed refunding plan (based upon the adjusted pro forma income account shown on Page 118 of this report) as follows:

Period	Times Debt Service Requirements Covered
12 months ended 3/31/40	1.35
Calendar year 1939	1.36
" " 1938	1.39
" " 1937	1.89
" " 1936	2.00
" " 1935	1.50

As suggested elsewhere, we are of the opinion that the investments of the Coke Company in North Continent Mines, Inc., and S. W. Shattuck Chemical Company should be liquidated. While there may be reasons why these investments should not be pledged with the trustee of the new mortgage, we are of the opinion that substantially all of the proceeds of such liquidation should be used to retire debt.

In conclusion, if the entire maturity is to be financed by debt securities, it is our opinion that the proposed financial plan discussed above is a constructive step in meeting the problem presented by the impending maturity of the present joint first mortgage bonds and in improving the present debt structure. We are further of the opinion, assuming the merged company follows the operating policies suggested elsewhere in this report, and assuming further that sound financial policies, particularly a conservative dividend policy, are pursued in the future, that under normal conditions the company will be able to service the proposed debt.

PUBLIC REGULATION AND FRANCHISES

The authority of the Illinois Commerce Commission is defined in the following terms:

"The Commission shall have general supervision of all public utilities, except as otherwise provided in this Act, shall inquire into the management of the business thereof and shall keep itself informed as to the manner and method in which the business is conducted. It shall examine such public utilities and keep informed as to their general condition, their franchises, capitalization, rates and other charges and the manner in which their plants, equipment and other property owned, leased, controlled or operated are managed, conducted and operated, not only with respect to the adequacy, security and accommodation afforded by their service but also with respect to their compliance with the provisions of this Act and any other law, with the orders of the Commission and with the charter and franchise requirements."

The term "public utility" as used in the Commission Act is very broadly defined. It includes any agency which "may own, control, operate, or manage, within the State, directly or indirectly, for public use, any plant, equipment or property used or to be used for or in connection with the transportation of persons or property or the transmission of telegraph or telephone messages between points within this State; or for the production, storage, transmission, sale, delivery or furnishing of, heat, cold, light, power, electricity or water; or for the conveyance of oil or gas by pipeline; or for the storage or warehousing or grain; or for the conduct of the business of a wharfinger or that may own or control any franchise, license, permit or right to engage in any such business."

The Commission is specifically vested with authority to fix rates which are just, reasonable and sufficient. This mandate appears to protect the utilities against unduly low rates as well as the public against exorbitant charges. In connection with the determination of rates, the Commission has the power to ascertain the value of any public utility property in the state and to fix the annual charge for depreciation.

The authority of the Commission also extends to the issuance of securities and to the granting of certificates of convenience and necessity. The latter question is covered in the following terms:

"No public utility shall begin the construction of any new plant, equipment, property or facility which is not in substitution of any existing plant, equipment, property or facility or in extension thereof or in addition thereto, unless and until it shall have obtained from the Commission a certificate that public convenience and necessity require such construction."

The Illinois Commission Act was thoroughly revised by the 1933 legislature and now has many of the features found in the Wisconsin law. The following summary covers the interesting provisions that were added:

The Commission is given jurisdiction over holders of the voting stock of public utilities to such extent as may be necessary to enable it to require the disclosure of the identity in respective interests of every owner of any substantial interest in such voting stocks. Jurisdiction is also extended to affiliated interests having transactions other than ownership of stock with public utilities to the extent of access to all accounts and records of the affiliated interests relating to such transactions. In general, the definition of affiliated interests includes any person or corporation directly owning or being a party in a chain of successive ownership of ten per cent of the voting stock of a public utility. It also includes every corporation or person which, in the opinion of the Commission, after hearing, is actually exercising any substantial influence over the policies and actions of a public utility, even though such influence is not based upon stock ownership.

No management, construction, engineering, supply, financial or similar contract and no contract or arrangement for the purchase, sale, lease or exchange of any property or for furnishing of any service made after the enactment of the law with any affiliated interest shall be effective unless it first shall have been filed with and approved by the Commission. If the Commission disapproves a contract as being not in the public interest, it may disapprove any payments made under the contract as an expense in a rate proceeding.

Since the change was made in the law, the activity of the Commerce Commission has increased, and regulation may be said now to be quite aggressive.

All of the regulatory powers of the State Commission, with a certain few exceptions including the power to regulate the issuance of securities, are subject to the Home Rule Act passed in 1921. This act gives cities the right to assume regulatory power over public utilities upon the approval of such local regulation by a majority of the voters at a referendum election. Upon such approval the authority of the city supersedes that of the Illinois Commerce Commission. It is specifically provided that cities adopting the Home Rule plan shall have the right to prescribe public utility rates and the method of procedure is to be the same as that provided in the Illinois Commerce Commission Act. An investigation as of January 1, 1928, revealed no case where a city had taken advantage of the Home Rule provision, and so far as we know, there has been no such action since that date.

As subsidiaries of North Continent Utilities Corporation, a registered holding company, the Gas Company and the Coke Company are subject to the broad regulatory provisions of the Public Utility Holding Company Act of 1935 which is administered by the Securities & Exchange Commission.

In the opinion of counsel, the companies are not subject to the jurisdiction of the Federal Power Commission.

The Gas Company has the right to operate its property in the territory served by virtue of ordinances, agreements, grants, licenses and certificates of convenience and necessity obtained by it from various governmental bodies having jurisdiction in the territory and also easements obtained by it from various individuals, firms and corporations. August 13, 1942, is the earliest stated termination date of any such ordinances, agreements or grants. The following is a list of the principal communities served showing the number of ordinances in force in each community with respect to the service of gas, the stated expiration date of such ordinances, and the population of each community.

	No. of Ordinances	Stated Expiration Date	Population 1940 Census (Preliminary Figures)
Deerfield	1	May 13, 1946	2,278
Glencoe	2	Sept. 20, 1946	6,758
Grayslake	1	May 18, 1975	1,179
Highland Park	24	Jan. 2, 1945	14,332
Highwood	1	April 10, 1945	3,700
Lake Bluff	3	Oct. 1, 1945	1,715
Lake Forest	41	Sept. 17, 1945	6,510
Libertyville	3	July 7, 1946	3,918
Mundelein	1	Aug. 7, 1979	1,325
North Chicago	2	Sept. 25, 1945	8,403
Waukegan	1	Jan. 18, 1947	34,111
Winnetka	3	July 23, 1946	11,712
Zion	1	Sept. 8, 1955	6,533

In the instances above where more than one ordinance is in existence in a given community, all ordinances have the same stated expiration date.

We are informed by counsel for the company that, in their opinion, which is based primarily on the decision of the Supreme Court of Illinois in the Geneseo case, failure to renew any franchise at its expiration will not in and of itself subject the company to ouster from its use of the streets by the municipality in question. Counsel further advise that the courts of Illinois have not specifically passed upon the question whether, in view of the Act creating the Illinois Commerce Commission and the interpretation thereof adopted in the Geneseo case, a municipality may require of a company, after expiration of its franchise, compensation for the use of streets. Counsel believe, however, it is doubtful that a municipality under such circumstances may so require compensation.

While there is the possibility that the company may have to pay compensation in the form of rental for the use of the streets of license fees or any other kind of tax, it must be pointed out that there is no noticeable trend toward this type of taxation upon gas utilities in the State of Illinois. In our opinion, the early expiration dates of the company's franchises are not of serious consequence.

PPS/KAM;a
August 1, 1940.

MEMORANDUM

DUFF & PHELPS REPORT

In reading the above report, some of the highlights of interest that were noted follow.

Page 13 - Meters and revenue on mile of main of North Shore Gas higher than Western United; sales per meter less; does electric division help support gas division in Western United?

Pages 16, 17, 51, 52 - Emphasized importance of and dependency on coke sales in our economy.

Pages 21, 28 - Water gas plant at Deerfield would not be advisable.

Page 28 - Limitation of possibilities of butane.

Page 30 - Recommends liberal main extension policy to offset competition.

Pages 42, 110 - Recommends relaxation of customer deposits account good will and interest saving;

Page 43 - Natural gas expense 26,000 in 1931. This was chiefly a Chicago office expense.

Page 49 - Drop of 24-1/2% in average price of all gas sold between 1931 and 1939 appears significant.

Page 52 - With 88.7% of gas revenue obtained from residential, is diversification good?

Page 59 - 64% of gas sold for house heating was billed at 45¢ rate.

Page 64 - Ties coke price variation to that of scrap iron, which is a new thought.

Page 68 - Our cost per therm from 1935 to 1939 was 3.4% compared with 4.75% per therm paid by Public Service Company to Peoples for mixed gas. However, this is not strictly comparable as Public Service cost includes fixed charges on supplier's investment. Racine's cost during the same period, 3.64¢ per therm.

Page 73 - High pressure distribution a factor in operating cost.

Page 74 - Emphasizes the advisability of continuation of sales promotion.

Page 74 - Criticizes the district office rentals. This is chiefly due to Winnetka.

Page 87 to 99 - More or less emphasizes necessity for changes in rate structure to build load, avoid further losses, and fight competition.

Page 90 - Contains a very interesting paragraph regarding Mr. Klopf.

Page 100-- Automatic water heating saturation is somewhat low.

Page 101 - Gas heating helps to hold cooking, water heating, and refrigeration load against concentration. Recommends concentrating on water heating and refrigeration loads.

Page 102 - Points out low saturation in water heating in Waukegan and Libertyville.

Page 103 - Notes unfavorable cost of gas refrigerators account of Servel's monopoly.

Page 110 - It is rather difficult to understand the criticism of attention to customers' inquiries and complaints as the Baehr Organization was extremely strict on this point and every effort was always made to take immediate care of any customer request.

Page 123 - Note remarks on Home Rule Act of 1921.

Note third photostat following Page 49, common stock dividends and balance after dividends in years 1931 and 1932.

TO: Messrs. Conover
Mulholland

Exhibit T

NORTH SHORE COKE & CHEMICAL COMPANY

STATEMENT OF GAS PRODUCED, COST OF PRODUCTION AND HOLDER COST PER MCF

For the Period from June 1, 1928 (date of commencement of operations) to December 31, 1928; For the Calendar Years 1929 to 1939, Both Inclusive, and for the Twelve Months Ended October 31, 1940

Period	Mcf produced for sale	Gross production cost	Less residuals produced	Production cost before profit on residual sales	Profit on residual sales	Net production cost	Holder cost per Mcf before profit on residual sales	Holder cost per Mcf after profit on residual sales
November 1, 1939 to October 31, 1940	1,564,186	$1,000,362.26	$607,810.13	$392,552.13	$112,431.58	$280,120.55	$0.2526	$0.1802
Year 1939	1,416,916	919,789.51	584,540.39	335,249.12	95,442.82	239,806.30	0.2366	0.1692
" 1938	1,447,841	1,021,109.79	647,275.33	373,834.46	168,362.34	205,472.12	0.2583	0.1419
" 1937	1,259,682	978,528.73	692,129.22	286,399.51	279,119.50	7,280.01	0.2274	0.0058
" 1936	1,060,188	888,072.59	627,384.51	260,688.08	200,110.59	60,577.49	0.2459	0.0571
" 1935	1,089,324	859,221.24	581,251.01	277,970.23	100,635.65	177,334.58	0.2701	0.1723
" 1934	1,076,566	828,840.05	584,038.99	244,801.06	69,906.64	174,894.42	0.2274	0.1625
" 1933	1,126,458	675,018.92	494,792.78	180,226.14	10,104.07	170,122.07	0.1600	0.1510
" 1932	1,064,054	587,617.50	404,984.15	182,633.35	(53,948.90)	236,582.25	0.1716	0.2223
" 1931	758,768	554,171.80	478,562.75	75,609.05	39,129.33	36,479.72	0.0996	0.0481
" 1930	1,170,910	923,781.66	754,953.95	168,827.71	85,051.95	83,775.76	0.1442	0.0715
" 1929	1,115,086	926,138.41	805,772.00	120,366.41	117,793.62	2,572.79	0.1079	0.0023
June 1, 1928 to December 31, 1928	616,188	496,221.78	435,002.37	61,219.41	15,450.59	45,768.82	0.0994	0.0743
						Average	0.1954	0.1016